

FRUIT CROP PROSPECTS for 1929

The General Outlook

By PAUL FROEHLICH,
U. S. D. A.

THE CROP of tree fruits seems to be light in nearly all parts of the country, according to official reports based on July 1 condition. In comparison with the fairly good fruit crops of last season, apples and pears seem likely to show a reduction of one-sixth; grapes, oranges and lemons, a reduction of one-fourth; peaches and grapefruit, a reduction of nearly one-third; and California prunes, a reduction of more than two-fifths. Apricots, figs and olives seem to be the only important fruits that will show a production approaching or exceeding that of last year.

General Crop Conditions

Apples: The prospective total production of apples in 1929 is 154,300,000 bushels, which would be about 17 per cent less than the 1928 crop but one-fourth more than the 1927 production. Prospects are particularly unpromising in some of the important commercial States, but the general shortage of fruit supplies this year is expected to result in rather close utilization of the apple crop. Production of apples doubtless will be considerably below the recent five-year average for this fruit.

The commercial crop is indicated as 29,900,000 barrels, compared with about 35,300,000 last season and a five-year average of about 32,500,000 barrels. The commercial crop of apples in New York, Pennsylvania, the Virginias and Illinois probably will be lighter than that of 1928, but increases are seen in New England, Michigan and the Ozark region. In most of the western producing districts the decrease from last year's production may be, roughly, one-fifth, though California shows a probable decrease of 36 per cent. General condition of the total apple crop in July averaged 54 per cent of normal or nine points lower than last season.

Peaches: A slight decline in production prospects for peaches occurred during June. The July estimate of 47,075,000 bushels now compares with 68,374,800 bushels in 1928 and 45,643,000 in 1927. The North Central States alone show an increase over last season. In all other divisions, peach production is indicated considerably below the 1928 record. The South Atlantic States as a group are likely to fall 43 per cent short of their big 1928 crop of 16,375,000 bushels. The Georgia crop is so light that shipments for the season may be around 5,000 cars, instead of 9,500 as predicted two months ago. Conditions of peaches on July 1 averaged only 50 per cent, as against 71 per cent at the same time last year. Among the individual States, heavy production is indicated for New Jersey, Virginia, Illinois, Missouri, Tennessee, Oklahoma and Texas. But the gains in these States will be more than offset by sharp decreases in such important areas as Georgia, North Carolina, New York, California and Washington.

Pears: The 1929 pear crop is now forecast at 19,781,000 bushels. This is slightly less than the June estimate, but is still a little above the light crop of 1927. Compared with last year, it represents a decrease of about 4,200,000 bushels. All geographical divisions except the South Atlantic States show decreases from 1928, but the biggest shortage is in western producing districts, where the combined crop of pears may be about one-fifth less than that of last season. New York expects a decrease of about one-third. Average condition of pears throughout the United States was only 53 per cent of normal, or 14 per cent less than in July, 1928. Shortage of California pears and lateness of the season is seen in the total movement of only 20 cars by July 6 this year, as against 740 cars by that time last season.

Grapes: Condition of the grape crop in July was only 70 per cent of normal, which is the lowest figure for the past 30 years excepting 1921. Practically every important producing State reports an unusually low condition for this fruit. The severe spring freeze is largely responsible for the poor outlook in California, the leading producing State. In one aspect, a reduction of the California grape crop may be a blessing in disguise, because shipments during recent years have been almost greater than markets could well absorb. Raisin varieties in California show a condition of only 68 per cent, compared with a full crop last year. Table grapes and wine varieties are reported as 70 per cent and 76 per cent respectively, whereas at the same time last season they stood around 95 per cent of normal. A production forecast on grapes will be issued in

August. Total shipments of grapes during the early part of this season have been less than half those of a year ago, and during the forepart of July averaged only 15 or 20 cars daily. California, Texas and Florida were shipping.

Cherries: The condition of cherries in 10 commercially important States declined from 64 per cent on June 1 to about 56 per cent on July 1. Lowest conditions are reported in some of the lake States and in Oregon and California. In most other western States, crop indications are quite fair. Rains damaged the cherries in parts of the Pacific Northwest and in Utah. Considerable development in the growing of this fruit has occurred in

northern Colorado during recent years. Local reports indicate possibly 3000 acres, mostly sour varieties of cherries, in the Loveland-Fort Collins district. The crop is grown principally for canning and processing, although considerable quantities are shipped fresh to market. The price for this season was expected to be around \$110 per ton, but future developments may change the price level.

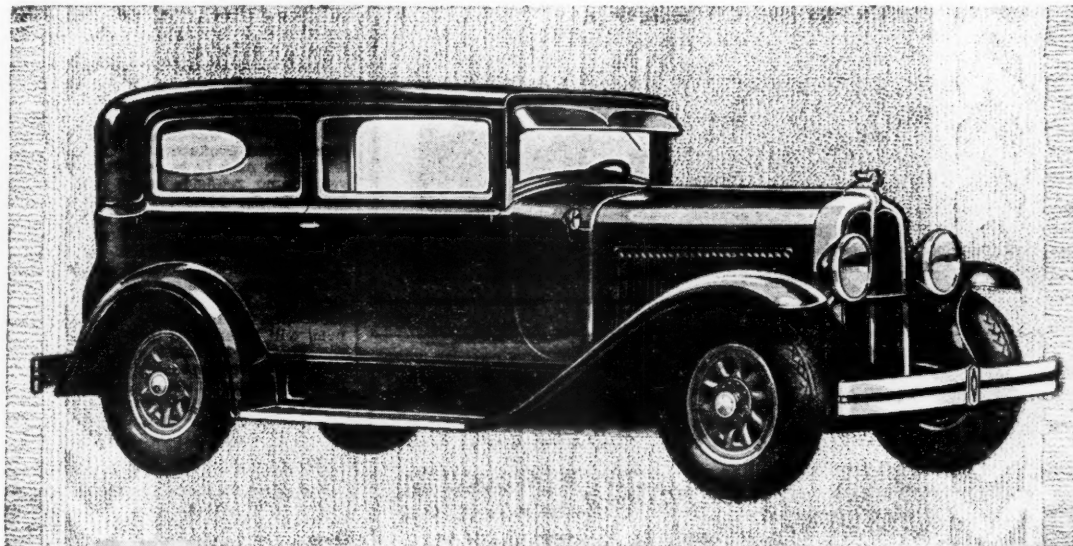
Summer Apples Active

Shipments of summer apples from eastern areas have been nearly twice as heavy as movement during the early part of the 1928 season, mainly because of the earlier opening of carlot movement in some of

the leading States. Most of the gain over last season has been in Delaware, though Illinois was credited with more cars than any other State. By the first part of July, daily forwardings from a dozen sections were averaging 60 cars. The western apple crop was greatly delayed and had scarcely begun moving to market by July.

The most-desired varieties of early apples were jobbing in consuming centers at \$1.50-\$3.25 per bushel basket, which was slightly lower than the range of a year ago. Important sources of supply by August should be northern California, southern Illinois and the Virginias, in addition to other shipping districts. Apple shipments increase during the late sum-

Investigate all these big car qualities
... this greatest of all values ...
and you will do as thousands of farmers have done



2-Door Sedan, \$745 Body by Fisher



American farmers are paying the Pontiac Big Six the finest compliment an automobile can receive. They are investigating its outstanding value—its numerous big car qualities—its fine reputation for power, performance, dependability and stamina. And they are buying this remarkably successful car in greater numbers than ever before in its history. Here are some of the unusual qualities of the Pontiac Big Six.

Big Car Performance—Greater power, speed, acceleration and smoothness... piston displacement increased to 200 cubic inches yielding 60 horsepower at 3000 r. p. m.

Big Car Long Life—Sturdy, short stroke, perfectly balanced, 53-pound crankshaft equipped with Harmonic Balancer to eliminate torsional vibration... full pressure adjustable lubricating system which reduces bearing friction to the minimum and assures positive lubrication at all speeds... crankcase ventilation to keep engine oil free from water... automatic control of water temperature, eliminating need for radiator shutters.

Big Car Safety—Two entirely independent braking systems... four-wheel, noiseless, internal-expanding dirt-and-weather-proof service brakes... and an emergency brake operating on the transmission... providing the utmost driving safety.

Big Car Comfort—Big, roomy bodies by Fisher in a variety of popular colors... highest quality hardwood and steel construction... free from squeaks and rattles... upholstered in attractive long-wearing materials... Fisher VV type windshield... adjustable driver's seat... foot-controlled headlights... and other comfort features,

And remember that the price of this remarkable car has not been increased. That is still another reason why you should go and see an Oakland-Pontiac dealer... why your choice will be the same as that of thousands of other farmers when you investigate the Pontiac Big Six.

Pontiac Big Six, \$745 to \$895, f. o. b. Pontiac, Michigan, plus delivery charges.

Consider the delivered price as well as the list price when comparing automobile values... Oakland-Pontiac delivered prices include only reasonable charges for handling and for financing when the C. M. A. C. Time Payment Plan is used.

OAKLAND MOTOR CAR CO., PONTIAC, MICH.

The New PONTIAC BIG SIX
\$745
PRODUCT OF GENERAL MOTORS

Cletrac

CRAWLER TRACTORS

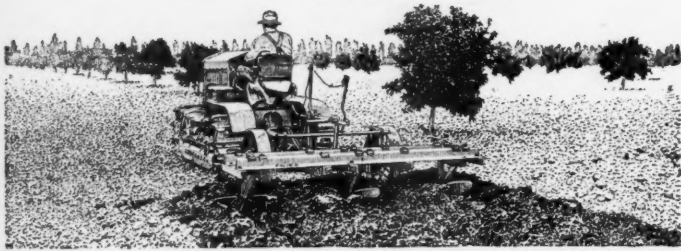
ANY day's work is an easier day's work—when you own a Cletrac. It's so easy to start, so easy to hook up to your implements, so easy to steer and so comfortable to ride that you're never tempted to "wait a few days" before starting a job. And right there is one of the big reasons why fine trees and quality fruit are always the rule where Cletrac does the cultivating. Its ease of operation is a constant invitation to get work done on time.

Once you have seen a Cletrac handling orchard work you'll never be completely satisfied with any other tractor. You'll want its abundant power and sure traction—its easy control among the trees—its ability to work "close in"—its freedom from soil-pack and slippage even in loose or muddy soil—its many other features that have made it the favorite among fruit-growers all over the world.

Ask your Cletrac dealer for a demonstration of these finer tractors—or write for the new, illustrated, 32-page Cletrac Catalog.

THE CLEVELAND TRACTOR CO.

19301 Euclid Ave., Cleveland, Ohio



Books for Fruit Growers

BEGINNERS' GUIDE TO FRUIT GROWING

By F. A. Waugh. A simple statement of the elementary practices of propagation, planting, culture, etc. \$1.25

AMERICAN FRUITS

By Samuel Fraser. This is a standard work and an authoritative guide. It outlines what to do and tells why and when. It is of equal value to the amateur as well as commercial fruit grower. No other book covers the subject as thoroughly and practically. Cloth, 916 Pages, Ill., \$4.75

THE PRINCIPLES OF FRUIT GROWING

By L. H. Bailey. The present edition is completely revised and includes much new knowledge for the aid of the fruit grower. It considers location and climate, planting, tillage, fertilization, and maintenance of the orchard and berry patch in full detail. Chapters also included on accident and injury, spraying with insecticides or fungicides, harvesting, grading and packing. Cloth, 432 Pages, Ill., \$2.50

ORCHARDING

By V. E. Gardner, F. C. Bradford and H. D. Hooker. A comprehensive survey of the entire field of modern fruit growing; a sketch of the functioning of fruit trees; an outline of the methods and problems of the fruit industry. The book opens with a discussion of tree structure, tree growth and fruiting habits, etc., and then takes up in logical sequence such topics as treating winter-injured trees, grafting, nursery practices, orchard ill, spraying schedules, transportation and refrigeration, marketing, and a bird's-eye view of orcharding as a business. 311 Pages, Ill., \$3.00.

CYCLOPEDIA OF HARDY FRUITS

By U. P. Hedrick. Useful in identifying varieties, choosing between them, finding which ones are suited to a locality, and learning their history and other interesting facts. The different classes of fruits, their species and varieties are described. Includes apples, crab apples, pears, quinces, apricots, cherries, nectarines, peaches, plums, grapes, brambles, currants, gooseberries, cranberries, huckleberries, blueberries, strawberries and miscellaneous fruits. Cloth, 370 Pages, Ill., \$6.00

brambles, currants, gooseberries, cranberries, huckleberries, blueberries, strawberries and miscellaneous fruits. Cloth, 370 Pages, Ill., \$6.00

THE NURSERY MANUAL

By L. R. Bailey. Completely rewritten and revised. The book is in two divisions. The first describes propagation by seeds, spores, separation, division, cutting, budding and grafting. The division on nursery practice lists the major diseases and insect pests, describes their injuries and gives control measures. The latter half of the book contains a nursery list of plants, giving propagation and cultivation methods for each. Cloth, 456 Pages, Ill., \$2.50

APPLE GROWING

By M. C. Burritt. A book for the average farmer in the northeastern states with its small apple orchard. It gives practical information on subjects such as planning the orchard, planting and growing, pruning, cultivation, cover cropping, fertilizing, insects, diseases, spraying, harvesting, storing, marketing, renovating old orchards, and the cost of growing apples. Cloth, 177 Pages, \$1.00

SYSTEMATIC POMOLOGY

By U. P. Hedrick. An innovation in this book is the introduction of simple keys for the identification of varieties of the tree fruits and the grapes. The keys are especially useful in identifying and comparing varieties. More than half of the book is given over to descriptions of the common commercial varieties of apples, pears, apricots, cherries, peaches, plums, grapes, raspberries, blackberries, currants, gooseberries, cranberries and strawberries. Cloth, 488 Pages, Ill., \$4.00

THE COMMERCIAL APPLE INDUSTRY IN NORTH AMERICA

By J. C. Folger and S. M. Thomson. Advice on selecting a locality and a site for a commercial apple orchard is one of the valuable contributions of this book. Commercial apple growing regions in the United States, with advantages and disadvantages of climate, varieties and markets are discussed. All of the phases of successful planting, management and marketing are discussed fully and from a business standpoint. Cloth, 466 Pages, Ill., \$3.00

Books sent postpaid on receipt of price. Send orders to

BOOK DEPARTMENT,

AMERICAN FRUIT GROWER MAGAZINE

53 West Jackson Boulevard,

CHICAGO, ILL.

mer and reach their annual peak in October.

Many Apple Trees Removed

In 12 of the last 15 years, the average farm price of apples has been below the general pre-war wholesale price level of all commodities. As a result, millions of apple trees have been removed and others have been neglected. From 1910 to 1925 the number of apple trees in the United States decreased nearly 40 per cent, but production has been practically maintained, according to the apple survey of the Department of Agriculture. A marked tendency toward the concentration of commercial apple orchards in the more favorable sections and a gradual elimination of unprofitable orchards are reported. These tendencies are accompanied by a drift toward the concentration of production of fewer varieties.

Although further increases in commercial apple production may be expected during the next few years, the rate of increase will be less than it was during the last 10 years, and the future appears somewhat brighter for the real commercial grower who is favorably located and who produces apples of high quality at low cost.

Total apple production has decreased slightly since 1917, but commercial production has steadily increased. Carlot shipments have increased at an average of 4600 carloads a year since 1918, and movements by motor truck have grown considerably. Increased production per tree has largely offset the decrease of nearly 40 per cent in number of trees. Commercial production is expected to continue at a high level for several years, but recent changes and present tendencies promise a better approach to stability in the apple industry.

Roadside markets are expanding rapidly in many States. A chain of roadside markets is being established in Du Page county, Illinois, for the purpose of selling southern Illinois fruit and produce direct from producers to Chicago motorists. The plan is to establish one central year-round roadside stand with adequate facilities for receiving, holding and distributing carloads of fruits and vegetables. Eight smaller stands are to be built on the nine important hard roads leading west from Chicago, to be operated in the fruit season. Apples, peaches, pears, berries and other fruits and vegetables, especially those produced in southern Illinois, will be shipped in iced cars direct to the central roadside stand, where they will be redistributed much as chain stores handle produce. The possibility is considered of shipping by motor truck, so that fresh fruit will be available the following morning with but one handling.

Prospects in Canada and England

Canadian blossom prospects were most encouraging for an average to good crop of fruit for the 1929 season. The blossoming of apples was the heaviest in years in the eastern provinces, especially in Nova Scotia, which now promises a record crop. Conditions in British Columbia from a blossom standpoint were promising. It is believed that some varieties will be patchy, but an outturn of about 75 per cent of the crop of 1928 is expected. The 1928 crop was very heavy, however, and this year's crop should about equal the demand.

Apple prospects in England at the beginning of July varied from light to good. Of the culinary apples, Lane's Prince Albert were expected to be good, while Bramley's Seedling and Newton's Wonder were generally light. Damage from sawfly has been reported in Kent and Essex. The outlook for dessert apples was good for Worcester Pearmain, Beauty of Bath, and Allington Pippin, but Cox's Orange Pippin is light. The pear crop in England is variable. The set was fair but considerable dropping was reported.

Trade reports on the condition of the apple and pear crops of Continental Europe indicate that apple production will be generally medium to good and above the poor crops of last year, with the ex-

ception of crops in Austria and the Italian Tyrol, while pears are reported good with the exception of those in Germany and Czechoslovakia. It was still too early to make very definite forecasts of the crops, as weather conditions will greatly influence the final outcome. Frosts caused some damage, but largely to pears and in most cases only locally.

California Grapes

Considerable shifting was reported in the supervising agencies connected with the co-operative marketing of grapes in California. The light crop this year will help solve some of the marketing problems of previous seasons. Shipments probably will fall below the average figure for most varieties.

The production of numerous grape by-products was the subject of a recent conference of growers, manufacturers, and research workers at the California College of Agriculture. The by-products include fresh grape juices; filtered muscat and Thompson grape juice as a substitute for cane sugar syrup in commercial fruit canning; two types of syrups, red for grape beverages and white for ginger ale bases; a blend of muscat and red juices; grape soda made by a similar blend of syrups instead of juices; fruit punch using red grape concentrate, and grape ale, which employs grape concentrate in place of sugar.

Georgia Peaches Short

A most surprising feature in the peach market was the shortage of the Georgia crop this year. Pre-season estimates indicated about 9500 carloads available, but by the first part of July it looked as if only 5000 or 6000 cars would actually be shipped, compared with 16,000 last year. Shrinkage occurred in all varieties. Elbertas—the main crop—were arriving rather freely in large distributing centers, but the deal was expected to wind up quickly and probably be closed by July 20. After the middle Georgia crop was out of the way, only about 350 carloads were expected to move from the northern part of the State.

Quality of many shipments was nothing extra, but the demand at shipping points continued good and fairly high prices were realized. Hileys brought mostly \$3.25 per six-basket carrier of large-sized fruit. Medium to large Elbertas started at \$3.75, but declined about one dollar within two weeks' time. Medium-sized Hileys returned \$2.75-\$3 per crate at North Carolina points during the first part of July. Georgia Elbertas were jobbing in terminal markets at \$3.25-\$5. Movement of peaches was becoming active in nearly all States except the northern tier. Peak shipments in eastern Texas were expected by July 25, but only 400 cars were anticipated in that district. Size and quality were good. Weekly forwardings from all States had increased to about 1000 cars but were still only half as heavy as last summer.

The Department of Agriculture recently published Technical Bulletin 115, entitled "Factors Affecting the Price of Peaches in the New York City Market." This is a detailed study of interest to all peach shippers, and copies are available on request.

Miscellaneous Fruits

The supply of watermelons was very heavy this year, sometimes averaging over 1000 cars daily, and arrivals of watermelons and cantaloupes may have interfered somewhat with sales of tree fruits. Cherry shipments during early July were moving at the rate of 45 cars daily, almost entirely from Washington, Oregon and Idaho. Southern California lemon movement was averaging 75 cars each day. Orange shipments had decreased sharply to 175 cars daily. The supply of plums and fresh prunes has been less than half that of the early part of the 1928 season, and movement had dropped very materially until the season opens in the Pacific Northwest. The Yugoslavia prune crop is short, and there probably will be a good European demand this season for American dried prunes.

The State Fruit Reports

ALABAMA

July 10.—On the basis of July conditions (36%), Alabama will harvest but 533,000 bu. of apples, compared with 885,000 bu. last year and a 5-year average of 834,000 bu. No commercial figures. The peach crop, too, is short, with a crop of but 540,000 bu. compared with 1,350,000 bu. in 1928 and a 5-year average of 1,004,000 bu. Pear crop condition appeared as 50% on July 1, as compared with 68% last year and 57% average condition in July for 10 years. 1929 production forecast at 157,000 bu., as against 234,000 bu. in 1928 and an average crop of 170,000 for the 5-year period. Grape conditions show 66%, as compared with 74% in 1928 and 77% average in July for 10 years. The crop in 1928 was 759 tons, and the 5-year average 706 tons.—U. S. Crop Rep't.

ARIZONA

July 10.—According to conditions on July 1,

as compared with the same date in previous years, Arizona will this year harvest 97,000 bu. of apples, 60,000 bu. of peaches, 15,000 bu. of pears and possibly 1500 tons of grapes.—U. S. Crop Rep't.

ARKANSAS

July 10.—From conditions in July, 1929, this year's apple crop will probably exceed last year's by 100,000 bu. Conditions, July 1: 1929, 46%; 1928, 49%; 10-year average, 54%. Forecast for 1929, 2,302,000 bu. The 1928 crop was 2,200,000 bu., and the 5-year average, 3,181,000 bu. Commercial apple production: 1929, 469,000 bbls.; 1928, 414,000 bbls.; 5-year average, 546,000 bbls. The 1929 peach crop of 2,734,000 bu. is a drop from the 3,000,000 bu. crop of 1928. The 5-year average peach crop was 2,008,000 bu. The pear crop will be about the same as that of 1928, 102,000 bu. The con-

(To Page 15)

1929
Italian
and with
any and
early to
crops,
tly in-
caused
and in

ted in
d with
pes in
ar will
blems
obably
r most

pe by-
nt con-
s, and
College
include
it and
ate for
it can-
grape
bases;
grape
syrups
ing red
which
ce of

peach
georgia
es in-
e, but
as if
lly be
year.
El-
riving
nters,
nd-up
July
o was
loads
thern

thing
oints
prices
ostly
sized
arted
ollar
sized
e at
first
job-
5-\$5.
ctive
thern
exas
400
strict.
for-
sased
only

ently
itled
ches
is is
each
re-

very
over
mel-
ered
erry
ving
en-
and
ove-
day.
rply
ums
half
son,
ial-
cific
p is
ood
ner-

ions
000
bu.
-U.

this
ast
1:
%
rop
ge,
on:
ear
of
bu.
rop
out
on-

The SOUTH WATER MARKET

By W. H. HALL, United States Department of Agriculture

What Is Wrong with the Grape Industry?

GRAPES rank second among all fruits grown in the United States in point of total carlot shipments, being surpassed only by apples. Last season the total carlot movement amounted to 80,183 cars, of which California shipped 71,569 cars, the greater portion of which was juice grapes, consisting of such varieties as Muscats, Alicante Bouschet, Zinfandels, Petite Sirah, Carignane, Malvoise and Grenache. California table stock consists principally of Flame Tokay, Malaga, Muscat and Cornichon. Concord, Moore's Early, Champion and Worden are the principal varieties of eastern grapes, and the main movement of this crop comes during the heavy movement from California, or from about August 20 to November 1.

During 1920 and for two or three years thereafter considerable readjustment took place in the California grape industry, chief of which was a substantial reduction in acreage. Many growers, fearing ruinous prices because of anticipated limited demand for juice stock, made drastic reductions in their acreage. Somewhat contrary to general expectations, prices for a period were unusually high, which naturally resulted in greatly increased plantings of new vineyards, and the full force of this additional acreage has been reflected in prices realized for the past several seasons.

Growers Must Realize Facts

That national prohibition has played a very important part in the grape industry is a fact with which every grape grower and dealer is quite familiar, and upon this one subject seems to hinge most of the problems with which the grape growers are concerned at present. Attempted interpretations by laymen of the law have apparently served no real purpose and may have been injurious at least to the extent of preventing, for the present at least, a clear conception of the whole subject so far as its relation to the grape industry is concerned. If the growers and shippers would realize the facts as they are, and base their operations upon these facts, instead of hoping and waiting for changes of conditions which may never take place, they would be better off.

The grape people of California, realizing the seriousness of the situation, have organized on a large scale under the leadership of experienced marketing men, and while it is yet too early to venture an opinion regarding the probable success of the work being carried on, it is pretty safe to predict that out of it will come results which will be of lasting benefit to the grape industry. One of the chief difficulties seems to be that too much may be expected in the form of direct results in a very short time. Present conditions have been brought about by changes that have been taking place for a number of years, and it is impossible to change these conditions in a few months.

Too Many Grapes?

Whether production has reached the saturation point is open to debate, because of the fact that there are so many angles to the subject and so many "ifs" to be gotten out of the way before it is possible to arrive at a definite conclusion. However, we may reasonably suppose that in the final analysis there will still be more or less uncertainty in the minds of those who are to pass judgment and make recommendations.

One of two things must be done, either production must be materially reduced or much wider distribution and greatly increased consumption brought about. The eastern grape States are in a much better position than California because of their nearness to the market and the further fact that diversification of crops is practiced to a greater extent than in the California grape sections. Last season hundreds, perhaps thousands, of cars of California juice grapes sold in large eastern markets at just about the cost of

freight and handling charges. Chicago at one time had more than 1500 cars on track and the other markets generally were proportionally just as heavily supplied. The old law of supply and demand could not be changed and low prices were inevitable. The supply of grapes was entirely too heavy for the demand, and owing to the highly perishable nature of this commodity, it must be moved quickly regardless of price or other market conditions prevailing at the time it arrives on the market. When decay once sets in, deterioration is very rapid and soon reduces the lot to a practically worthless condition.

While the present marketing machinery is perhaps not as efficient as might be desired, it is much better than it was five or 10 years ago. It has kept pace with the general progress in agriculture if we view the whole system of marketing, although there are numerous cases of pres-

ent day marketing that can be pointed to where methods are quite obsolete. A careful study of the methods usually employed in marketing the grape crop, especially the California crop, leads to the conclusion that while there are certain faults that should be corrected, and which no doubt will be corrected before many seasons have passed, still the chief causes of unprofitable seasons seem to be attributable more to other reasons than to inefficient marketing methods.

Grape Industry Must Be Made to Pay

Numerous lengthy news articles and editorials in various trade publications indicate quite clearly the interest being shown in the special work now being carried on and that which is being contemplated by the organizations carrying on this work. There is absolutely no way by which the results in actual dollars and

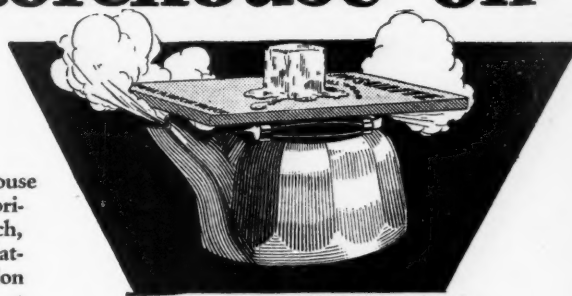
cents may be measured, and no doubt more or less unfavorable criticism will be heard from time to time, but we should not lose sight of the fact that the task of putting the industry on a strictly paying basis is a big one, and it will take a great deal of money and time to accomplish even a major portion of the desired results.

One thing is quite certain, and that is the impossibility of the indefinite continuation of existing conditions. Grape growers simply cannot continue season after season at a loss. The great amount of capital invested and the unprofitable condition into which grape growing has drifted most certainly justify the employment of sufficient time and money to work out plans for the betterment of present conditions. Future developments in this direction will be watched with a great deal of interest and it is believed that before another year rolls around a clearer picture may be had, not only of what has already transpired, but also of what may be expected for the future. The present grape season will soon be in full swing, and as usual we find a great variety of opinions as to what is likely to happen to the market. When the heavy October movement reaches the market, then, and not until then, will we know how the season is likely to wind up.

INSULITE

the Wood-Fiber Insulating Board

Holds Cool night Temperatures in your Storehouse on Warm Fall Days



YOU can hold safe temperatures in your storehouse more successfully with Insulite walls because authoritative laboratory tests show that Insulite, a full half inch, is 12½% more efficient than ordinary 7/16 inch insulating boards. See for yourself the superior protection Insulite gives by making the simple home test shown at the right.

Because Insulite walls are slow to transmit heat and cold, it means less trouble and work for you. Sudden changes in temperature do not call for as quick action when you have Insulite protection for your fruit.

You will also appreciate the durability of Insulite when you are handling crates and baskets in and out of your storehouse.

Scientific laboratory tests show that Insulite has much greater tensile strength than ordinary insulating boards, and greater bracing strength than sheathing horizontally applied.

Insulite is an all wood product, chemically treated to prevent deterioration and make it vermin and rodent resistant.

You give your fruit and vegetables the right start toward a winter in storage with minimum spoilage when you use Insulite.

With all of these advantages, Insulite costs no more than inferior boards. See your lumber dealer today for a supply.

THE INSULITE COMPANY

2005 Builders Exchange, Dept. 12
MINNEAPOLIS MINNESOTA

FULL ½ INCH THICK-MEANS
12½% MORE
EFFICIENT
INSULATION
THAN ORDINARY 7/16 INCH BOARDS

This simple test shows the superiority of Insulite. Replace the cover of a kettle of boiling water with a piece of Insulite

and on the Insulite put a cube of ice. Check the time required to melt the ice. Make the same tests with other boards.

MAIL THIS COUPON TODAY
FOR YOUR SAMPLE

THE INSULITE CO.,
2005 Builders Exchange, Dept. 12,
Minneapolis, Minn.

Gentlemen:

Please mail me a sample of Insulite to test for myself.

Name

P. O.

R. F. D. State

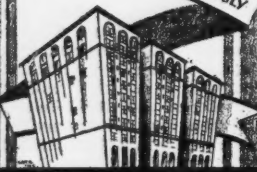
USE **INSULITE** FOR
Resists
COLD ~ HEAT ~ DAMPNES

**BARN ~ POULTRY HOUSES
HOG HOUSES ~ SHEEP SHEDS
MILK ROOMS ~ DWELLINGS**

IN PHILADELPHIA

The Hotel PENNSYLVANIA
39th and CHESTNUT STS.

600 FINE, LARGE OUTSIDE ROOMS
EACH WITH BATH, from \$3.00 DAILY



**UNRESTRICTED PARKING
SPLENDID RESTAURANTS
"CHOICE LOCATION"
NEW and MODERN**



Baskets for Apples, Peaches, Plums, Grapes, Tomatoes, Cucumbers, Beans, etc. Boxes and Crates for Berries, Cucumbers, Celery, Cauliflower and vegetables of all kinds. Plant boxes.

Catalog mailed on request

The Pierce-Williams Co.

South Haven, Mich., or Jonesboro, Ark.

MOUNT GILEAD CIDER AND FRUIT PRESSES

More juice per bushel—better quality—bigger profits. Standard for over fifty-two years for both commercial and domestic use. Complete line of other equipment for handling apples, grapes and other fruits. Send for full information and copy of "ORCHARD PRODUCTS NEWS."

THE HYDRAULIC PRESS MFG. CO.
501 Lincoln Ave., MOUNT GILEAD, OHIO

THE LAFAYETTE ASBURY PARK NEW JERSEY

ONE OF THE LEADING HOTELS

A Hotel of distinction; ocean and lake view; select clientele; capacity 300; white service; elevator; orchestra.

Rates upon request.

Tele. Asbury Park 1434

H. S. JACKSON
Owner-Prop.

Training for the Business of Fruit Growing

(From Page Six)

jobs. This is not necessarily true, although there always will be a good sprinkling of the white collars required.

The boy who has a college training should be better fitted to do the actual work of cultivating, spraying, pruning, picking, etc., than the untrained worker. It would certainly be unwise, however, for him to spend his best efforts upon such work, taking little or no time for thinking, planning, directing and keeping accounts. While attending to minor details or doing labor and chores that may be delegated to others and paid for at the rate of \$1.50 or \$2 per day, he may lose sight of an opportunity or advantage that is not likely to come again. Head work pays the highest wage because of the scarcity and resulting demand.

Thinking is the hardest work we do. In it we have the least competition. It pays the best from every viewpoint. The boy with four years of agricultural training should be able to think straighter and better than one of equal intelligence without such training. It is also true that the majority may be counted on to continue to think as little as possible. All the more reason, therefore, for the boy that has been trained to think and especially to think ahead.

Successful Growers Have Ability

The efficient and economical growing of fruit crops, as with the successful management of any other business, requires integrity, industry and imagination. If the agricultural college graduate does not possess these qualities, as well as a large portion of what is generally known as good common sense, he is not likely to be a success. The training received may even be a handicap in some instances.

Colleges are often criticized for turning out men who fail. This is usually unjust, because in most instances no establishment or institution can be expected to manufacture complete and place upon the

markets a finished and uniform product from raw materials which vary as greatly as the youths who attend college. Some are sure to be excellent, some good and still others (a small group generally) may be rated as poor.

Opportunities for College Graduates

College graduates are not only fitted for the competent and profitable management of fruit plantations, but they are also qualified to interest themselves in fruit growers' shipping associations, by-product factories, mercantile establishments, banks, real estate enterprises, and many other kinds of local employment of service to the people of their particular community.

Still other positions are open to the college graduate. He may become a teacher or investigator in colleges and universities, teacher of vocational agriculture, or county agent. Agricultural employment dealing with horticultural research, extension methods and problems, regulatory measures, and administrative and executive work is open in the United States Department of Agriculture for large numbers of graduates. Commercial concerns handling spraying chemicals, machinery, feeds, seed, fertilizers, etc., employ many graduates. Moreover, banks, real estate firms and manufacturers of various industrial materials employ numerous graduates. In fact, the supply of well-trained men for these and similar positions has never been equal to the demand. The need every year becomes more urgent. The field of activity for the agricultural college graduate is being extended, and the prospects for the college-trained, competent fruit grower never looked brighter than they do at this time.

Cost of College Education

The cost of attending an agricultural college will vary greatly. About \$600 a year, where the student is reasonably economical, should be a fair estimate. It is safe to say that in most institutions more than one-half of the students work all or

a part of their way through school. The various departments of the colleges employ many students, and there are many who work at odd jobs around town. The usual price paid is from 25 to 35 cents per hour.

While students may work their way through from the very beginning, yet it is not advisable to go to an agricultural college with less than \$150, since it may take several weeks to become acquainted and to locate regular outside work. Moreover, it is practically impossible to work all of one's way and carry a full course of study. Where much outside work is performed, the student should not carry more than three-fourths of the regular number of hours of school work.

Most agricultural colleges have a large fund from which money is lent to students at a low rate of interest, usually about four per cent. To be eligible for this loan, however, it is generally necessary for the student to have completed successfully at least one year's work. He is also required to show ability and trustworthiness.

Training Produces Leaders

A study of the education of successful men shows that 74 per cent of the leaders are college men. Only one per cent of the total population of the United States is college men. That is, the other 99 per cent of our population, those who do not have the benefit of a college education, furnishes only 27 per cent of the leaders. Investigations also show that 277 times as many college men have become wealthy as men who are not graduates of institutions of higher learning.

There is nothing more practical than an agricultural college education, because it can be turned into financial gain and into achievements of civic honors. Better than all this is the opportunity for unselfish service to the community, to the State, and to the nation for the betterment of the basic industry—Agriculture.

Agricultural Colleges Offer Scientific Training in Horticulture

FOR THE INFORMATION of our younger readers, AMERICAN FRUIT GROWER MAGAZINE asked the various State Colleges and the Colleges of Agriculture connected with State Universities for a brief announcement of their courses of instruction in Horticulture.

In the table below is given the name of the college in nearly every State in which one or more courses are given that embody the instruction necessary to a workable knowledge of Horticulture.

Following the name of each institution will be found the address and the name of the officer to whom to send for full information as to the courses of study, cost, and other details each intending student will wish to secure.

A letter addressed to the proper officer in the institution in or nearest to your

State will bring complete information or catalog.

Intending students should get all the necessary information upon which to base a decision during the month of August, as many of these colleges begin their work toward the first of the month of September.

State.	Institution.	Address.	For Information Write to	Title.
ALABAMA	Alabama Polytechnic Institute	Auburn	M. J. Funchess	Dean
ARIZONA	Univ. of Arizona, College of Agriculture	Tucson	J. J. Thorner	Dean
ARKANSAS	Univ. of Arkansas, College of Agriculture	Fayetteville	Dan T. Gray	Dean and Director
CALIFORNIA	Univ. of California, College of Agriculture	Berkeley	E. D. Merrill	Dean
COLORADO	State Agricultural College	Fort Collins	E. P. Sandsten	Prof. of Hort.
CONNECTICUT	Connecticut Agricultural College	Storrs	S. P. Hollister	Prof. of Hort.
DELAWARE	Univ. of Delaware, School of Agriculture	Newark	C. A. McCue	Dean
FLORIDA	Univ. of Florida, College of Agriculture	Gainesville	W. L. Floyd	Prof. of Hort.
GEORGIA	State College of Agriculture	Athens	T. H. McHatten	Prof. of Hort.
HAWAII	Univ. of Hawaii, Division of Agriculture	Honolulu	R. Keller	Dean
IDAHO	Univ. of Idaho, College of Agriculture	Moscow	E. J. Iddings	Dean
ILLINOIS	Univ. of Illinois, College of Agriculture	Urbana	J. C. Blair	Head, Hort. Dept.
INDIANA	Purdue University, School of Agriculture	LaFayette	J. H. Skinner	Dean
IOWA	Iowa State College	Ames	B. S. Pickett	Head, Hort. Dept.
KANSAS	State Agricultural College	Manhattan	L. E. McCall	Dean
KENTUCKY	Univ. of Kentucky, College of Agriculture	Lexington	T. P. Cooper	Dean
LOUISIANA	Louisiana State University, A. and M. College	Baton Rouge	W. R. Dodson	Dean
MAINE	Univ. of Maine, College of Agriculture	Orono	L. S. Merrill	Dean
MARYLAND	Univ. of Maryland, College of Agriculture	College Park	H. J. Patterson	Dean
MASSACHUSETTS	Massachusetts Agricultural College	Amherst	M. Lewis	Dean
MICHIGAN	Michigan State College	East Lansing	F. C. Bradford	Dean
MINNESOTA	Univ. of Minnesota, Department of Agriculture	St. Paul	W. C. Coffey	Assoc. in Hort.
MISSISSIPPI	Mississippi A. and M. College	A. and M. College	J. M. Lipscomb	Dean, Hort. Dept.
MISSOURI	Univ. of Missouri, College of Agriculture	Columbia	F. B. Mumford	Dean
MONTANA	Montana State College	Bozeman	F. B. Linfield	Dean
NEBRASKA	Univ. of Nebraska, College of Agriculture	Lincoln	E. A. Burnett	Dean
NEW HAMPSHIRE	Univ. of New Hampshire, Col. of Agriculture	Durham	F. W. Taylor	Dean
NEW JERSEY	Rutger's University, College of Agriculture	New Brunswick	F. G. Helyar	Dean
NEW MEXICO	New Mexico College of Agriculture	State College	H. L. Kent	President
NEW YORK	Cornell University, College of Agriculture	Ithaca	O. W. Smith	Secretary
NORTH CAROLINA	State College of Agriculture	Raleigh	H. Schaub	Dean
NORTH DAKOTA	North Dakota Agricultural College	Fargo	H. L. Waiser	Dean
OHIO	Ohio State Univ., College of Agriculture	Columbus	Alfred Vivian	Dean
OKLAHOMA	Okla. A. and M. College	Stillwater	C. T. Dowell	Dean
OREGON	Oregon Agricultural College	Corvallis	A. B. Cordley	Dean
PENNSYLVANIA	Pennsylvania State College	State College	R. L. Watts	Dean
PORTO RICO	Univ. of Porto Rico, College of Agriculture	Mayaguez	C. E. Horne	Dean
RHODE ISLAND	Rhode Island State College	Kingston	G. E. Adams	Dean
SOUTH CAROLINA	Clemson Agricultural College	Clemson College	E. W. Sikes	President
SOUTH DAKOTA	South Dakota State College	Brookings	N. E. Hansen	Head in Hort.
TENNESSEE	Univ. of Tennessee, College of Agriculture	Knoxville	C. A. Willson	Dean
TEXAS	A. and M. College of Texas	College Station	Chas. Puryear	Dean
UTAH	Agricultural College of Utah	Logan	E. G. Peterson	President
VERMONT	Univ. of Vermont, State Agricultural College	Burlington	J. L. Hills	Dean
VIRGINIA	Virginia Polytechnic Institute	Blacksburg	H. L. Price	Dean
WASHINGTON	State College of Washington	Pullman	Edw. C. Johnson	Dean and Director
WEST VIRGINIA	West Virginia Univ., College of Agriculture	Morgantown	G. R. Lyman	Dean
WISCONSIN	Univ. of Wisconsin, College of Agriculture	Madison	J. A. James	Asst. Dean

The State Fruit Crop Reports

(From Page 12)

dition of the grape crop on July 1 was 74% as compared with last year's condition at this time of 81%. The 1928 grape production was 17,000 tons.—U. S. Crop Rep't.

June 25.—The peach crop this year is above normal. A rough estimate of the amount to be shipped will be around 3500 cases. It may even reach 40-0. The principal variety grown is Elberta. The principal district is Nashville, including all of Howard county in the southwest part of the State. There is some injury by curculio. No brown rot is showing up at this time.

The apple crop is fair to average. So much of the crop is moved by trucks now that it is hard to estimate the number of cars. Ordinarily they will run around 4000 cars. The principal variety is Ben Davis, followed closely by Jonathan and Grimes Golden. The principal summer variety is Yellow Transparent. These will start moving about July 1. A few are now moving in the Clarksville district. The principal apple growing area is in northwest Arkansas, including Washington and Benton counties. Jonathan and Delicious will be harvested the last week of August. Ben Davis and later varieties in October.

Grapes are grown in two districts, the heaviest in northwest Arkansas, including Washington and Benton counties. The variety grown is Concord. The first picking will occur about August 4. Another grape section is in the Arkansas River Valley. The varieties grown are Campbells Early and Delaware. Picking of Campbells Early will be about July 20. No prices have been offered, but there is some talk of \$60 per ton.

Many growers are constructing roadside stands or have them in operation. Our weather is rainy in northwest Arkansas and dry in the southern part of the State. Some scab developed on apples due to excess rain and cool weather. Some of the grapes shattered due to rain at blossoming time. Generally speaking, the fruit in the State is in excellent shape.—C. Woolsey.

CALIFORNIA

Apples—The total crop of apples in California will amount to 7,280,000 boxes if the present outlook is maintained until harvest. This is the smallest crop since 1925. Last year the total production was 13,105,000 boxes, while in 1927 it was 7,458,000 boxes. The commercial crop, or that part of the total which is sold for fresh consumption, is forecast at 4,308,000 boxes, compared with 6,861,000 boxes in 1928. Last year considerably more than the usual proportion of the crop was used for drying.

There is a comparatively small crop of Gravensteins in prospect. Early June conditions were very favorable and some improvement in prospects was to be expected but the high temperatures from June 20 to July 4 resulted in considerable burning with more or less dropping of fruit. It is now thought that shipments will run from 35% to 40% of last year when 2021 cars of Gravensteins were shipped. The outlook has also declined in the Watsonville area where the Bellefleurs and Newtown Pippins are the principal varieties, as the crop is now figured at about one-half of last year, which was a record production. Reports from the Yucalpa-Beaumont district of southern California indicate that this area is expecting a yield similar to that of 1928.

Peaches—Low temperatures the first three weeks in June, together with the unseasonable rain, caused considerable mildew on the leaves in some sections. Little of it, however, had made its appearance on the fruit when the warm weather came, which checked its spread for the present. The total production of peaches of all varieties is now forecast at 209,000 tons, which is an increase of 3000 tons or 1% over the report of a month ago. This may be compared with 618,000 tons produced in 1928 and 402,000 tons in 1927. Based on the present outlook, the total production of clingstones will probably approximate 158,000 tons. In 1928 the total production amounted to 414,000 tons of which 322,000 tons were canned, 22,000 tons shipped to out-of-State markets and consumed fresh within the State, and about 70,000 tons not utilized. Areas producing freestone peaches were not so seriously affected by the frost. Production is forecast at 141,000 tons. This may be compared with 204,000 tons produced last year, of which 155,000 tons were utilized for drying, 3800 tons canned, and 45,200 used fresh locally or shipped to out-of-State markets.

Apricots—Warm weather the last of June affected "coty" in the early areas by hastening maturity and preventing some of the fruit from reaching the size suitable for canning. There was also some heat injury in the Santa Clara Valley. In spite of this, however, it is expected that the total production will amount to about 180,000 tons. In 1928 the total crop was estimated at 175,000 tons.

Pears—Production of all varieties is forecast at 172,000 tons. As nearly as can be determined, the crop is composed of 149,000 tons of Bartlett and 23,000 tons of fall and winter varieties. The above figures include all frost-marked fruit of which there is considerable in some areas. In 1928 the total production was estimated at 224,500 tons, of which about 200,000 tons were Bartlett and 24,500 fall and winter pears.

Cherries—The harvest has now been completed and the preliminary estimate of production is 15,000 tons. There was some loss to both canning and shipping cherries from rain and warm weather during June. Regardless of this, however, the total tonnage harvested was slightly above that expected a month ago. Interstate shipments amounted to 604 cars compared with 885 a year ago. Some of the Royal Anne cherries, not suitable for canning because of recent heat wave, are being dried. In 1928 the total production of cherries was about 18,500 tons.

Plums—The condition of the plum crop declined slightly during June. The rain caused some damage to varieties being harvested at that time, particularly Climax. Production of all varieties is forecast at 41,000 tons. In 1928 about 66,000 tons of plums were harvested. This was slightly under the actual crop as the small sized fruit of some varieties was kept off the market.

Prunes—There was no change indicated in the prune crop the past month and the probable crop is forecast at 128,000 tons. Conditions during the first three weeks of June were very favorable to the prune crop and offset any heat injury that may have occurred from June 20 to July 4. Last year the production of prunes was 220,300 tons, while in 1927 it was estimated at 225,000 tons.

Oranges and Lemons—When the schedules were returned for this report, the full effects of the recent heat wave could not be fully determined. Correspondents, however, reported the July 1 condition of both Navel and Valencia to be 70% of normal, which is a drop of seven points the past month. Last year at this date the condition of Navel was 92 and that of Valencia 94.

The July condition of the lemon crop was 65% of normal compared with 73 a month ago; 87 last year and the 10-year average of 82.

Grapes—There was a decline of one point in the condition of all grapes compared with a month ago. Subnormal temperatures and high humidity the first three weeks in June were the cause of considerable mildew in some districts. Otherwise conditions were favorable and vines made excellent growth. The heat wave from June 20 to July 4 stopped to a large degree the spread of mildew but caused sunburn injury to some varieties, particularly Muscats. The condition of Wine grapes July 1 was 76% of normal compared with 96 at this time last year. The condition of Table grapes was 70, while in 1928 it was 95. Raisin grapes were 68% of normal compared with 101 last year.

No forecast of production in tons will be made until the August report.—N. I. Nielsen.

COLORADO

July 10.—Apple conditions as of July 1 are reported: 1929, 72%; 1928, 67%; 10-year average, 73%. Total crop: 1929 forecast, 2,716,000 bu.; 1928 crop, 3,020,000 bu.; 5-year average, 3,054,000 bu. For the commercial apple crop: 1929 forecast, 795,000 bbls.; 1928 crop, 800,000 bbls.; 5-year average, 856,000 bbls. Peaches promise 656,000 bu. for 1929, as compared with 600,000 bu. in 1928 and the 5-year average of 798,000 bu. Conditions as of July 1 are given as: 1929, 65%; 1928, 63%; 10-year average, 68%. Pears promise 518,000 bu. for 1929, as compared with 185,000 bu. in 1928, and a 5-year average of 501,000 bu. Conditions July 1, 1929, 80%; 1928, 59%; 10-year average, 83%. Grapes show 80%, about the same as last season, when the crop harvested was 298 tons.—U. S. Crop Rep't.

DELAWARE

July 10.—The harvest of early apples, such as Early Ripe Transparent, etc., has been completed and Williams Early Red are now being picked. The crop was considerably less than last year and the shipments will probably be smaller than have left the State for a number of years. There was considerable stem end russetting, which was associated with adverse weather conditions rather than spray materials. Some russetting is also found with the late apples that is entirely associated with weather conditions. However, this will not affect the grading of fruit. The general crop of late apples is in very good condition, although the set is considerably below normal. Some varieties are very poorly set, and extreme variations are found in the set of late apples throughout the State. Insect and disease prevalence, while appearing more common than last year, does not at this time show that the grading of late apples will be affected more than usual. Peaches are showing excellent condition, and the crop throughout the State will be considerably above the yield of last year. Condition of fruit is better than has been experienced for a

number of years. Peach moth is showing less prevalence than has been observed for some years. Curculio injury was quite common early in the season, but the drop of stung fruit has been generally cleaned up, so the prospects for clean quality fruit appears excellent at this time. Growers have been giving more attention to thorough spraying and dusting of peaches so as to produce a crop of high quality for this season.—J. F. Adams.

FLORIDA

July 12.—Condition of citrus has not made any material change during the past month and still indicates a production much below that of the past season. Oranges are reported at 63% compared with 63% a month ago and 81% on July 1, 1928. Condition of grapefruit is 57% compared with 58% last month and 78% a year ago. Tangerines are reported at 57% compared with 59% a month ago and 82% on July 1, 1928. The reported condition of Satsuma oranges, 70%, is 5% below that of June 1 but 8% above that of a year ago. There is a good crop of avocados in south Florida this season. Production of peaches has been below that of a year ago.—H. A. Marks.

Lake Alfred, July 16.—Quite contrary to the State estimates of 60% for next year's crop, this section will have from 90% to 100%. The quality is much better, even though there is a large percentage of May bloom. Insects such as white fly, purple scale and mealy bug are not giving much trouble. A few growers report Florida red scale as being bad in spots. The rust mites have been numerous and have required constant dusting up to the first of July. Little spraying has been done with oil. Rains have been abundant. As a result, the various scale and white fly fungi are producing good control. The Citrus Experiment Station reports 18 inches of rain for May and June.

More tire mileage that's what

FISK All-Cords

give you



THE All-Cord process, perfected by Fisk, has made Fisk tires famous for mileage.

By this better method, Fisk builds a carcass of sinewy cords alone, with no cross strings to cause internal friction. The tough cords, cushioned in rubber, can never rub or wear. Longer life is the natural result.

Other Fisk features give durability, and add comfort and safety. The Fisk tread grips securely on any kind of roads. The graduated side-walls insure full balloon comfort. And the multiple cable bead provides a firm foundation, giving solid strength at the rim.

Because of this advanced design, Fisk All-Cord Tires are equal to every test. Use Fisks on your car or on your truck—for durability, for safety, and for excess mileage.

FISK



Time to Re-tire
Get a FISK
Write: Fisk Tire Co., Akron, Ohio

Cover crops are in excellent shape. No Midfly has been reported from this section. Everyone is optimistic as to the final result of the campaign of eradication.—S. F. Poole.

GEORGIA

July 10.—The apple crop in this State will be but slightly over half of last year, according to indications this month. The present condition is placed at 38%, with a promise of 707,000 bu., as compared with condition of 71% in July, 1928, and the 1928 crop of 1,400,000 bu. Average July condition for 10-year period, 61%. Average crop over past 5 years, 1,105,000 bu. Commercial apple crop estimated at 63,000 bbls. for 1929. In 1928 it was 117,000 bbls., and the 5-year average was 94,000 bbls. The peach crop showed a worse reduction, from 10,000,000 bu. in 1928 to 3,835,000 bu. this year. The 5-year average production was 7,247,000 bu. Peach conditions on July 1 were as follows: 1929, 34%; 1928, 84%; 10-year average, 68%. The peach crop is forecast at 144,000 bu. for 1929, based on condition of 43%, July 1. Conditions in July: 1928, 71% (1928 crop 245,000 bu.); 10-year average, 59%. The 5-year crop average was 188,000 bu. July grape conditions: 1929, 71%; 1928, 83%; 10-year average, 80%. The grape crop in 1929 was 1672 tons, the average for 5 years, 1594 tons.—U. S. Crop Rep't.

IDAHO

July 10.—From conditions on July 1, 1929, of 84% (76% in 1928, 71% are 10-years), Idaho will harvest an apple crop of 5,191,000 bu. as compared with even 5,000,000 bu. for the commercial apple crop: 1929 estimate, 1,384,000 bbls.; 1928 crop, 1,500,000 bbls.; 5-year average, 1,340,000 bbls. Peach conditions as of July 1: 1929, 73%; 1928, 83%; 10-year average, 45%. Peach production: 1929 estimate, 294,000 bu.; 1928 crop, 335,000 bu.; 5-year average, 170,000 bu. The peach crop will probably run 53,000 bu. for 1929, as compared with 22,000 bu. in 1928 and a 5-year average of 59,000 bu.—U. S. Crop Rep't.

June 21.—The crops at present are especially clean and free from insect pests, owing to the very active spray campaign, in which the growers have taken more than ordinary interest. Thinning activity has commenced in some of the apple orchards and the crop at present promises to be of more than ordinary quality. Codling moth and some other pests are extremely active this season and more than ordinary numbers necessitate careful spray applications.

The shipping of cherries has started in Lewiston and will commence in the Emmett Valley next week. Some fruit storages are in the process of construction, and roadside stands are always in evidence.

The apple crop at present promises to be a little below that of last year in tonnage, although an increased size in the individual fruits may make an aggregate of nearly as many as were shipped in 1928. The cherry crop is less than promised at blossoming time. Prunes are a normal crop and promise to be of exceptionally fine quality, due to the fact that ample moisture and wonderful weather conditions have prevailed. Both peach and apricot crops show the effects of some winter injury, although the quality will be excellent.—M. L. Dean.

ILLINOIS

Princeton, July 13.—Apple crop very disappointing. Fair crop of Transparent, Duchess, Wealthy and other early varieties. Fall and winter kinds from light to failure. Peaches, cherries and plums were generally caught by

the heavier frosts and are a failure, with occasional exceptions. Scab weather affected the early apple foliage in spite of spraying, but better up the ward in years. Well cared for apple orchards are showing about 50% of a full crop, while the neglected ones are worthless. Growers are giving their peach orchards better care and a full crop is expected. The crop has nearly all been thinned. The dryer and warmer weather of the past two weeks has been very beneficial to both peaches and apples.—John A. Gage.

Tiskilwa, July 13.—The apple crop is decidedly spotted. For this section I would report a 60% crop. In some orchards, under favorable conditions, the crop is heavy. In other good orchards the crop is possibly 10%. Apple scab is quite prevalent. Continued wet weather since July 1 is causing this late development. Growers are spraying for this brood of codling moth which is expected to emerge July 22 to 24 in this section, according to a notice sent out by the Horticultural Department of the University of Illinois. Jonathan, Grimes, York, Salome, Maiden Blush, Wealthy and McIntosh are the heavy crops. Delicious, Golden Willow are very light. Peaches are about 60% of a crop, with quality good.—W. R. Soverhill.

Tunnel Hill, July 9.—We have just about finished the early apple harvest of Transparent and Duchess. The crop was medium to light, with prices good, first cars bringing \$3.25 for No. 1's and \$2 for No. 2's. Market was holding up well. The season has been bad for apple growing, extraordinary rains making for fungus trouble. Most orchardists are thorough sprayers and good packers, but most orchards apples had to be packed commercial, which is contrary to general practice. Peaches are doing well. Foliage is mostly good to excellent and fruit is clean. Most growers have thinned and an excellent crop is expected. Peach movement may begin for Elberta and Hales August 5 to 10. There are practically no winter apples, on account of adverse weather during blossoming time. Only light crop of Jonathans and Ingrams.—Guy Beauman.

INDIANA

July 10.—The apple crop for 1929 is estimated at 47% as compared with 56% in July, 1928, and a 10-year average of 51%. Total production forecast for 1929 at 1,946,000 bu., as compared with 2,520,000 bu. in 1928 and a 5-year average of 2,923,000 bu. Commercial crop estimated at 135,000 bbls., as compared to 176,000 bbls. in 1928 and a 5-year average of 205,000 bbls. Peaches: 1929, 62%, compared with 54% in July, 1928, and 10-year average of 40%. Peach production estimated at 709,000 bu. for 1929, as compared to 605,000 bu. in 1928 and a 5-year average of 429,000 bu. Pears: 1929, 55%; July, 1928, 60%; 10-year average, 48%. Pear production forecast for 1929, 248,000 bu., as compared with 288,000 bu. in 1928 and a 5-year average of 238,000 bu. Grapes: July, 1929, 75%; July, 1928, 84%; 10-year average, 73%. No production estimates for 1929 until August. 1928 production, 4980 tons; 5-year average, 3302 tons.—U. S. Crop Rep't.

July 17.—The apple crop in the state is going to be rather light, with not over 50% of a full crop. Summer apples are now being marketed at a range of \$1.25 to \$2.00 a bushel and we have a good crop of Transparents and Duchesses. Rome Beauty is consistently set heavy over the state, but other varieties vary. Due to early rains and unfavorable spraying conditions, there is some scab showing up. The peach crop prospects for the best they have been for years and we will harvest one of the largest peach crops that we have ever had. It looks as though the quality and size will be good.—Doyle Zaring.

IOWA

July 1.—The following fruit crop conditions are based on 100% for a normal crop: Summer apples, 64; fall apples, 43; winter apples, 58; pears, 45; plums, 48; cherries, 48; strawberries, 79; grapes, 80; red raspberries, 74; black raspberries, 73; blackberries, 74; gooseberries, 66; currants, 73; and peaches, 42%. The condition report on summer, fall and winter apples by districts are as follows:

	Summer	Fall	Winter
Northwest	69	72	69
North Central	69	70	62
Northeast	69	69	55
West Central	67	64	58
Central	61	57	57
East Central	60	61	54
Southwest	71	64	61
South Central	57	64	61
Southeast	67	65	57

The average yield reported for cherries was 25 qts. per tree, which would make 1750 qts. per 70-tree acre. The average yield for strawberries was 4000 quarts per acre.

It will behoove every orchardist to thoroughly spray the rest of the season because A No. 1 fruit will, no doubt, bring a good price this year as the crop is comparatively light throughout the Middle West.—Leslie M. Carl.

Des Moines, July 11.—I think for the State that the possibility of percentage as given in the State report for winter apples will drop some before picking season. We had a wonderful bloom all over the State this spring but due to cold weather which, no doubt, caused lack of pollination and possibly lack of vigor, there was in some cases a heavy June drop. While codling moth worms do not seem at present so numerous, apple scab infection took place between the cluster bud and calyx spray due to a long blooming period caused by cool, damp weather. Due to rather light prospects, we anticipate very good prices, especially on winter apples.—R. S. Herrick.

KANSAS

July 11.—Central Kansas promises a fairly good crop of apples and grapes. Among the heavily set varieties of apples are Grimes and Delicious. Winesap and Jonathan are disappointing as the cold, rainy weather at blossoming time prevented an adequate set of fruit. But little damage has been done by the codling moth this year. In contrast, scab has been unusually difficult to control and will take a heavy toll from poorly sprayed orchards. Black rot is showing on the grapes but well sprayed vineyards promise four tons or more per acre of Concord and Wordens. Sales of Moore Early are starting at 5c a pound in this section.—R. J. Barnett.

KENTUCKY

Paducah, July 9.—Both apple and peach crops are spotted. Apples are somewhat below 1928

crop and peaches less than half of 1928 crop. Prevalence of insects is no worse than usual, with the exception of the oriental peach moth, which has shown its appearance generally in this county. We cannot tell this early the extent of damage done by this moth. All orchards bearing fruit have been well sprayed, as all growers are receiving and expecting better prices than last year.—Charles A. Rotberger.

LOUISIANA

July 10.—According to present conditions (51%) this State will produce but 28,000 bu. of apples; just under the 1928 production of 30,000 bu. No commercial crop. Peach conditions of 51% as against 68% last year and a 10-year July average of 64%, figure but 152,000 bu. as compared with 211,000 bu. in 1928, and a 5-year average of 199,000 bu.—U. S. Crop Rep't.

MARYLAND

Easton, July 13.—Apples are lighter than they have been for the last 10 years. There will not be over 5% of a crop of Grimes (Golden Ben), Ben Stayman and Old Winesap, with about 20% of a crop of York. Last year our particular orchard shipped 20 cars of Yellow Transparent; this year we had only 2½ cars. Weather was so cold during blossoming time that the heavy blossom could not be pollinated.—W. E. Whitgott.

MASSACHUSETTS

July 17 (Wire).—The apple crop is somewhat spotty in Massachusetts. There is apparently a fair crop of McIntosh and a medium crop of Baldwins. Other varieties are very uneven. No prices have been quoted as yet. Curculio injury is bad in some sections and scab is showing up. Generally speaking, there is a fairly good outlook here this year.—William K. Cole.

MICHIGAN

Albion, July 13.—The cherry crop will probably be 10%, peaches about 10%, with no pears. Summer apples very scarce and winter varieties probably 30%. Baldwins and Spys look the best for varieties. Greenings, Jonathans and McIntosh not winter mentioning. Spraying has probably been done as well as usual but there is considerable fungus.—Early Brothers.

Grand Rapids, July 12.—A very good crop of sweet cherries is just being harvested. The prices are quite satisfactory. Sour cherries are very scarce, not over 25%. Montmorencies are ripe now, or nearly so. There are some aphids on sweet cherry terminals. No trouble with scab on cherries. Peach crop is very short due to bad weather at blossoming time. Apples have been kept free from scab and the crop promises well. Pears and plums are short crops, due also to bad weather at blossoming time. Grapes are looking fine and promise a very good crop.—F. S. Merrill.

Ludington, July 11.—Fruit prospects in general in this district are quite favorable. Weather conditions have not been favorable to the development of scab and other fungous diseases, although earlier in the season it was very difficult to get scab control. We have about a normal crop of apples, especially where bees were used for pollination. The general condition of apples is fair, although those who did not spray thoroughly have very poor quality. There will be about a normal crop of cherries. Most growers are thinning their peaches now. Pears are making good growth, but we will not harvest more than 60 per cent of a normal crop in this section. Some growers reported a rather heavy drop. A 50% crop of sour cherries is expected. We have some normal crop of sweet cherries. The harvest of sweet cherries and of Early Richmond has started. Sweet cherries are selling good and the bulk of the sour cherries will be sold at 7c a pound to the grower. Quality is fine. As a result of a heavy infusion of late set last year the growers are spraying more thoroughly than usual. Consequently, there is practically no sign of the disease thus far this year. In fact, all fruits are being sprayed more thoroughly than usual. As compared with last year, we may expect a little larger crop of apples, more pears and peaches and less cherries. On the whole the growers are quite optimistic as to their prospects at present.—Wesley S. Hawley.

Williamsburg, July 10.—The apple crop looks very good, about 75% of normal. There is some scab in the Snows and McIntosh. Spys and Wagener are pretty clean. There has been a good deal of cool, wet weather. I see no results of codling moth infestation. No shot hole fungus on cherries at present. Have sprayed cherries twice and will spray once more. Have sprayed apples five times, with an extra spray on the Snows and McIntosh. Will spray once more for second brood codling moth.—Granger Whitney.

MINNESOTA

July 10.—The apple crop seems to be running very good. Early frosts and freezes apparently did not affect this crop very much. The 1929 crop will run 75% to 80% full. The condition will be a little better about the Lake Minnetonka region. Plentiful rains and muggy weather the past few days may result in some scab, but there is a tendency to pay more attention to spraying, which will normally check any such outbreak.

The plum crop will be very light. There have been some large plantings of the new Minnesota State Fruit Breeding Farm varieties and had the spring been favorable, the first fairly abundant crop would have resulted this summer and fall. At blossoming time, however, there was a heavy freeze which just about cleaned out this crop. I have a 5-year-old orchard of about 1500 trees which will not produce over 50 to 100 bushels. Had the weather been favorable, there would have been a crop of at least 1000 bu. The Grey Cloud Orchards, near Newport, a very large orchard just coming into bearing, will have about 500 bu., about a 20% crop. John Kroger, of Rochester, with a large new orchard, reports a total loss.

The raspberry crop will be very good. It will be a little lighter in the north but very good in the south. Lathams predominate. Because of the light strawberry crop, the prices for raspberries are good.—Ray P. Spier.

St. Paul, July 10.—The apple crop in this section will be lighter. There were a number of late frosts, which killed the blossoms. One of our largest growers at LaGrange reports that he will have the lightest crop in years. Most of the fruit in this section is fall varieties so they do not come in competition with the winter apples.—R. S. Mackintosh.

MISSISSIPPI

July 10.—Apple conditions show 51%, with a crop of 153,000 bu. forecast for this year, compared with 220,000 bu. in 1928, when con-

ditions showed 62% at this time. Average condition in July for 10 years, 61%. Average crop for 5-year period, 217,000 bu. No commercial production. The peach crop, based on 52% in July, promises 431,000 bu., against 635,000 bu. in 1928, and a 5-year average crop of 500,000 bu. Pears, at 51% now, promise but 133,000 bu., against 194,000 bu. in 1928, and a 5-year average crop of 155,000 bu. Grapes are a minor crop, with 250 tons in 1928 and a 5-year average production of 260 tons.—U. S. Crop Rep't.

MISSOURI

Monett, July 17.—In the Ozark region the apple crop is very light as compared with the crops of previous years. However, spraying has been kept up and the fruit that we have is in fair condition. The estimated yield is far below the yield of last year. The strawberry crop was about three-fourths that of last year's movement. The acreage has decreased this season and we look for about a normal acreage for the coming season. There were about 2-00 carloads shipped this year, but there will not be more than 1500 next year. It is estimated that the grape crop will be very light this season, about 1500 or 2000 cars are expected from this district. About 90% of this crop is from the Concord variety and the rest is mainly Moores Early. So far there have been very few prices made on apples or grapes. A few cars of the early apples, such as Transparent and Maiden Blush, were contracted for at \$2 and \$2.50 per bushel f.o.b. loading point.—Charles Carmichael.

July 10.—The apple crop presents a present condition of 53%, as compared with 42% at this time last year, and 52% for the 10-year average. Total production for 1929, based on present conditions, estimated at 1,959,900 bu., compared with 3,380,000 bu. in 1928 and an average production for the past 5 years of 4,518,000 bu. The commercial crop promises 563,000 bbls. for 1929, compared with 474,000 bbls. in 1928, and the past 5-year average of 599,000 bbls. The 1929 peach crop is estimated, upon July conditions, at 53% or 1,285,000 bu., compared with 28% and a yield of 655,000 bu. in 1928, and the 5-year average of 966,000 bu. (year average 35%). Pears, as of July 1, show a condition of 50%, promising a crop of 342,000 bu. for 1929, compared with July 1928, condition of 26% and 1928 crop of 171,000 bu. The 10-year average was 47% with average production for 5 years of 387,000 bu. Grapes are estimated at 80% for July 1, 1929, compared with 84% July 1, 1928, and 73% for the 5-year period of 1918 to 1927. No production estimates for 1929 until August. 1928 production, 14,000 tons; average for 5 years, 7804 tons.—U. S. Crop Rep't.

Joseph, July 17.—Northwest Missouri had extremely heavy blossom weather. The weather was very cold and wet. This resulted in a very spotted crop. Jonathan and Wealthy sets best. Most other varieties light. Scab present in varying degrees of severity and set on unfertilized blocks very poor. Would estimate high-grade fruit at 60% of last year.—F. S. Merrill.

NEBRASKA

July 11.—There will be a light apple crop in southeastern Nebraska; heavier than last year but not as large as the crop two years ago. Conditions for scab have been very favorable. Varieties that are especially susceptible, like Delicious, are pretty badly spotted. So far conditions have been unfavorable for codling but moisture conditions have been very timely favorable. Quality other than that mentioned above should be excellent. Grapes promise a heavy crop, heavier than last year. There is a little black rot showing up on account of wet weather. The cherry crop was unusually light in the commercial section around Nebraska City. Growers who have any kind of a crop in prospect have sprayed consistently.—E. H. Hoppert.

NEW HAMPSHIRE

Derry, July 13.—The apple crop for this section is fair, with the McIntosh showing a better set than for last year. Baldwins are very light at this time; the quality seems better than for the last two seasons. The set of early apples, Wealthy, etc., is better than was expected earlier in the season. Apple scab has made a start in some orchards, but for the State, the McIntosh will be much better than last year. Insect pests are very bad. Trees not properly sprayed are entirely stripped of leaves in some cases. The growers who are taking good care of their orchards are looking for a good season.—P. H. Torrey.

Keeter, July 10.—Apples bloomed rather light in southern New Hampshire this year. Baldwins very scattering. McIntosh a little better. Gravenstein and Wealthy fair. Set is fair. Peaches bloomed light.—James A. Tufts, Jr.

NEW JERSEY

July 12.—Burlington county is the most important fruit growing section and our crop of apples is very light. Our main varieties are Starr, Wealthy, Stayman and Rome. There was wet weather during blossoming time. The Starr crop is only about one-quarter to one-third. The Wealthy crop is a good three-quarters while Rome is about one-third. The Stayman crop is almost a total failure. Peaches looked like a full crop but the dry weather is cutting them somewhat. Cherries were about one-third of a crop. Strawberries were nearly a full crop, although dry weather affected them in some locations. Prices on strawberries were high, running \$3 to \$8 a crate. Cherries also were high, running \$1.50 to \$2.25 for a 16-lb. basket. Starr apples are now moving at high prices. They began at \$3.75 a bushel in New York and are now about \$2.50 to \$2.75. In Philadelphia prices run from \$1 to \$1.75 for a five-eighths basket. Curculio has been worse than usual, with codling moth and aphid about as usual. Japanese beetles are somewhat less severe in sections where they have been serious. Most growers spray more than they can afford to.—E. A. Mechleng.

Hamorton, July 12.—We have practically no winter apples. As for peaches, we have a fairly good crop, but it is so dry, they are not developing and we are afraid they will be stunted should we get rain. Japanese beetles are bad on early fruit but probably will not bother the later fruits. Weather is very hot and dry.—L. M. Parkhurst.

Pine Brook, July 10.—The apple crop prospects in the northern part of the State are for a light crop. The set of fruit was hampered by unusually muggy weather at blossoming time. Furthermore, the June drop was quite severe as a result of poor pollination and in-

Large Enough
to Serve You Well
Small Enough
to Know You

Hotel Atlantic
Chicago

450 Rooms
\$2.00 to \$4.00

Clark Street-
Jackson Blvd.

ROESSLER & TEICH
Managers

Kill All Flies! They Spread Disease.
DAISY FLY KILLER attracts flies. Kills them clean, ornamental, convenient and cheap. Last all season. Made of metal, can't tip over; will not soil or injure anything. Guaranteed.

Insist upon
DAISY FLY KILLER from your dealer.

HAROLD SOMERS, Brooklyn, N. Y.

WEBSTER HALL
America's Finest Club Hotel
Pittsburgh, Pa.

Room with Running Water, \$2.00 up
Room with Private Bath, \$3.50 up
Ample Parking Space

set injury, as adverse weather prevented proper spraying. The peach crop will be lighter than anticipated. However, a light set of fruit has its advantages during this long continued dry weather.—R. W. DeBaun.

NEW MEXICO

July 10.—Three-fourths of New Mexico's total apple production is sold commercially. Apple conditions as of July 1 are given as: 1929, 64%; 1928, 45%; 10-year average, 60%. Total apple crop: 1929 forecast, 960,000 bu.; 1928 crop, 675,000 bu.; 5-year average, 973,000 bu. Commercial apple production: 1929 forecast, 235,000 bbls.; 1928 crop, 169,000 bbls.; 5-year average, 217,000 bbls. There is an indicated peach crop of 101,000 bu. and a pear crop of 58,000 bu., according to conditions on July 1. Grapes are in about the same shape as last year (83%) when the crop was 600 tons.—U. S. Crop Rep't.

NEW YORK

July 11.—The fruit crop in western New York is proving to be very spotted. Most varieties of apples bloomed well but owing to the cold and wet weather were not well pollinated. The June drop has been heavy. Both aphid and scab are prevalent in most orchards. Fall varieties of apples will be light. Baldwins will be only a little heavier than last year, about 50% of a crop. Greenings and McIntosh considerably lighter.

The pear crop will be the poorest in years. Very few Bartlett or Seckel. Kieffer light. Peaches will be a fair crop, both early and late. Plums light. Both sour and sweet cherries are about as last year. Just a fair crop. Grapes while below last year, promise fair.—Roy P. McPherson.

Hilton, July 13.—The apple crop in western New York is rather spotted. Crops are irregular due to cold weather at pollination time and to frost damage. All fall varieties up to and including Rhode Island Greening and McIntosh are lighter than in 1928. Baldwin, our principal variety, is about 50% heavier. Our crop as a whole will be about 25% greater than in 1928. Our best growers have sprayed well and their fruit is clean. But there is much unsprayed fruit. The pear crop is light and the peach crop only moderate.—M. C. Burritt.

Kendall, July 14.—We had the finest bloom in our western New York apple orchards but at present the outlook for a crop will be about 50% to 60% of normal for Baldwin. Other varieties not so good. Pears, especially Bartletts, will be the lightest in years. Peaches are a good crop in orchards that controlled the curl. Apple scab is showing very bad on the terminal growth and in some extreme cases on the fruit.—H. E. Wellman.

Kinderhook, July 15.—In the upper Hudson Valley, apples are no heavier than last year, about 50% of a full crop. McIntosh and Greening particularly light. Cherries and pears are light, say 35%. Grapes and peaches seem to be nearly a full crop.—Paul Judson.

Milton, July 13.—Up to the present the apple crop has been difficult to estimate. Frost and cold weather damage, causing a spotty and irregular set and an excessive June drop, with an abundance of scab, made prospects for an apple crop very uncertain in the middle Hudson Valley. At this date, the crop is beginning to shape itself. Baldwins and Wealthies show about 70% of normal; Greenings, 25% or less; McIntosh, 35% to 40%; Romses, Newtowns and Jonathans, a fair crop. On the whole, there will be more apples than in 1928, when the crop was very light. Pears are all but a complete failure. Peaches have a good set but there seems an abundance of oriental fruit moths which may result in a crop of wormy peaches. Grapes look very fine and promise a crop of high quality. No advance sales have been made.—Walter R. Clarke.

NORTH CAROLINA

July 10.—The apple crop shows a condition of 44% at this time, compared with 64% a year ago, and an average condition at this time for the past 10 years of 52%. Total production for 1929 is forecast at 2,992,000 bu., compared with the 1928 crop of 5,040,000 bu. and the 5-year average yield of 4,011,000 bu. The commercial crop figures are placed at 150,000 bbls. for 1929. The 1928 crop was 250,000 bbls. and the 5-year average 301,000 bbls. The peach crop this year, 1,868,000 bu. is about one-third less than the 1928 crop of 2,590,000 bu. Average for 5 years, 1,562,000 bu. Respective peach crop conditions: July, 1929, 51%; July, 1928, 75%; 10-year average, 54%. Pear conditions (41%): July 1) this year, promise a crop of 162,000 bu., compared with 60% a year ago when the crop was 243,000 bu. Average condition on July 1 for 10 years was 46%. Average crop for 5 years, 173,000 bu. Grapes show 75% this month compared with 77% a year ago and 78% for the 10-year average. Production in 1928 was 6,000 tons, 5-year average, 1238 tons, 1929 forecast in August.—U. S. Crop Rep't.

NORTH DAKOTA

Fargo, July 12.—This section has a fairly good fruit prospect, though unprecedented dry weather is having its effect. Apples, plums and all the small fruits are still in quite good condition, though as usual there will not be sufficient fruit to supply trade in this territory.—A. F. Yeager.

July 17.—Ohio fruit growers suffered severely from spring frosts and poor weather during pollination and as a result will have one of the lightest crops that has been produced for several years. The apple growers of southern Ohio were especially hard hit and only the Rome Beauty has come through with any kind of a crop. Fortunately, for the section, this variety is the most important one grown. The apples in the central part of the State are heavily set but even so this section is not considered as having a full crop. Northern Ohio had one of the heaviest blooms on apple trees that they have had for years but poor weather during pollination caused a heavy drop so that in many sections the crop will not be heavy. Taking the State as a whole, the apple crop will probably be about one-third of what it was in 1926 and about 60% of what it was in 1927. The peaches in northern Ohio in the most important area around Port Clinton suffered a complete freeze-out. The peaches in southern Ohio have come through with a good crop but there are not many trees and the orchards are scattered around close markets so that there will not be any carlot movement of peaches in Ohio.

Grapes have also been hit; some vineyards completely wiped out and others coming through with a good crop. The berry worm is becoming a very serious pest over the area west of Cleveland and will probably reduce the crop this year.

The small fruits, such as raspberries, are commanding a very good price and are of very good quality. The number of plantations of this fruit have decreased in the past few years because of the prevalence of virus diseases. Where these diseases have been rogued out carefully a few growers are finding it a very profitable business.—C. S. Holland.

OHIO

Wooster, July 12.—Quantity of fruit is more easily estimated now than quality, although abnormally heavy rains in late June and early July have put size on the apples far beyond the normal size at this season. Indeed the next two months will have to be extremely dry to prevent good-sized fruit. The factor of size is the only consideration that might in some cases make the crop go over early expectations. On the other hand, the early reports of a poor set and frost injury have been generally accentuated as the season has advanced.

Scab on foliage and fruit is probably the worst in 20 years. Orchards that have been carefully sprayed, however, are showing at least fair control. The prolonged period between pink and petal-fall apparently accounts for the heavy scab infection, with the petal-fall spray occupying a place of more importance in scab control than is usually the case. Rather spotted conditions even within the same community tell a story of severe frost damage, both in destroyed buds and frost-marked fruit. Curculio and aphid are serious in some orchards. We doubt whether there is more than one-half the amount of first-grade fruit in this section as a year ago. Thus far we have heard of no sales of winter apples. Early apples are starting high.

The prospect for peaches inland from the lake region is only fair at best and in many orchards peaches were completely wiped out by low winter temperature. Right now there seems less evidence of the peach moth than a year ago, although it is still too early to say how heavy the infestation will be. The peach crop in this section will hardly be large enough to supply the demands of the local towns and

smaller cities, to say nothing of the large cities nearby.—C. W. Ellenwood.

OKLAHOMA

July 10.—The apple crop looks like 677,000 bu. total production, of which 25,000 bbls. will constitute the commercial crop. The production in 1928 was but 350,000 bu., with 11,000 bbls. commercial. July 1 conditions were: 1929, 57%; 1928, 34%; 10-year average, 57%. The 5-year average total crop has been 863,000 bu. The peach crop in 1929 is figured at 1,072,000 bu., against 480,000 bu. in 1928, and the 5-year average crop of 957,000 bu. Pears should produce 161,000 bu. Grapes, at 78% in July, are better than last July when the condition was 71%. Last year's crop was 2100 tons.—U. S. Crop Rep't.

OREGON

July 1.—Hood River apples are expected to be a very short crop, probably not more than half of last year. Elsewhere in the State the situation is rather better, but the 1929 commercial crop will fall far short of last year.

Pears in the Rogue River district are expected to be only a little short of last year, and in the Hood River district about equal to last year. It is reported that Bartletts have largely been sold on cannery contracts, at very satisfactory prices.

Eastern Oregon cherries have been a good crop in most sections, but very light in the Willamette Valley. Prices have been very satisfactory to the grower.

Prunes promise a 50,000,000 to 60,000,000 dried crop in Oregon and Clark county, Washington. The crop is pretty uneven in some localities.

Strawberries suffered from dry weather in May and wet weather in June. Reports indicate that the production was about one-half of normal. Loganberries and raspberries were considerably damaged by winter kill, and apparently did not pollinize properly. The hot days late in June also caused some damage.—F. L. Kent.

PENNSYLVANIA

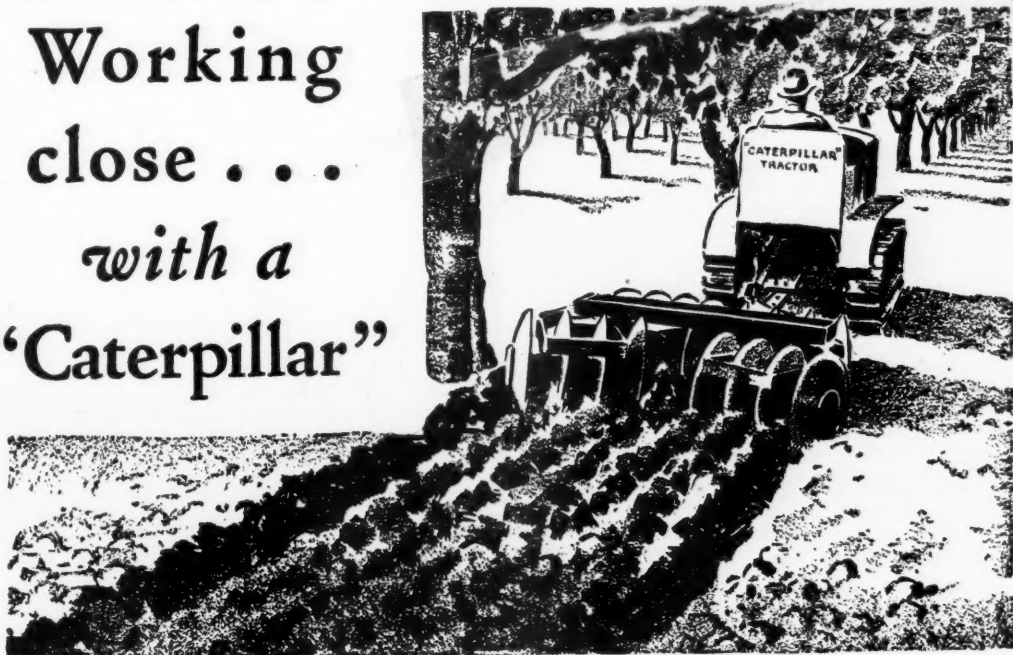
Allentown, July 13.—From present indications, there will be a less than 50% apple crop and a 60% peach crop. The duration of the present drought will be the deciding factor as to the ultimate yield.—P. S. Fenstermacher.

Beavertown, July 10.—Fruit crops are on the average about the same as in previous years. Growers are continually spraying to fight all insects.—Charles E. Agler.

Carlisle, July 11.—My orchard is located 3 miles west of Lysville, Perry county. It consists of 2700 trees 14 years old and 3600 trees 5 years old. The apple outlook as a whole in this county is not good. One man who owns two orchards has a very fair set in one orchard and a poor set in the other. An orchard adjoining me is not going to have much of a crop. This orchard was sprayed. As for my orchard, I feel that at least 2500 trees out of the 2700 are well set. For over two weeks there have been four men thinning and it will take several weeks more. The varieties consist of 600 Smoke House, very well set; 600 Stayman Winesap, fairly well set; 500 Grimes Golden, fairly well set; 500 Winter Rambo, very well set; and 500 Jonathan, fairly well set. We used the Niagara duster and dusted six times. Just as soon as the blossoms were properly open, the first dusting was done and the balance of the dusting was carried out with religious regularity. The present outlook is by far the best we have had.—Emmett R. Woods.

Easton, July 12.—We estimate the apple crop here at about 25%, being the lightest in the last 20 years at least. Grimes and Golden Delicious are fairly good, with 50% and 60% respectively. Stayman, York and Rome are very light, from 20% to 25%. Delicious are about a complete failure. Peaches have set a good crop, probably 75%. Our orchards are free from scab and other fungous diseases, with coding moth injury about normal. There are a lot of scabby early apples coming to market from unsprayed trees of local farmers, not orchardists. The only fruit we have sold to

Working
close . . .
with a
"Caterpillar"



The Model Ten, sure-footed and responsive, works close to the trees

ONE of the great advantages of the "Caterpillar" track-type tractor in orchard cultivation is its ability to work close to the trees . . . and under the laden boughs.

But even more important is its ability to work close in the matter of production costs . . . under the time and labor laden figure that marks the line between profit and loss in fruit production.

Firm, sure traction on cover crops . . . positive steering on hilly land . . . a width of disk or other tools that will enable you to cut out the rows with a single trip around a line of trees . . . the ability to turn in narrow headlands . . . ample power for heavy chisels and deep subsoilers.

Add to this the great amount of power in the control of one man . . . the ease of caring for the "Caterpillar" . . . the low fuel cost and the great economy of fuel due to small friction losses and the almost total elimination of slipping . . . the long life, based

on fine materials, balanced design and master craftsmanship.

. . . and you have a picture of "working close with the 'Caterpillar'." Every other great industry in the world has sought and found methods of working close to basic costs. The orchardist who is to make money consistently will be the man who follows their example and adopts the methods that hold production costs to a low level. Write for our illustrated folder . . . The "Caterpillar" in the Orchard.

Caterpillar Tractor Co.

EXECUTIVE OFFICES: SAN LEANDRO, CAL.
Sales Offices: Peoria, Illinois; 50 Church Street, New York; San Leandro, Cal.

Holt Combined Harvesters Russell Road Machinery
"Caterpillar" Tractors

CATERPILLAR
REG. U. S. PAT. OFF.
TRACTOR

add vegetable profits to your fruit income

The publishers of AMERICAN FRUIT GROWER MAGAZINE issue another magazine, similar in size and shape to this, devoted exclusively to the growing and marketing of

**Watermelons Cantaloupes
Tomatoes, Potatoes, Beans
Cabbage, Cauliflower, Onions
Lettuce, Cucumbers, and other
COMMERCIAL VEGETABLE
CROPS**



American Produce Grower

covers the problems of commercial vegetable production and marketing in the same thorough, practical manner as American Fruit Grower Magazine covers the subject of fruit growing. The Editorial Advisory Board comprises the leaders of the industry, and their years of experience and research are at your service in the pages of AMERICAN PRODUCE GROWER.

These Experts Offer Service to You

H. F. TOMPSON, Managing Editor

C. L. ISBELL, Alabama
M. F. WHARTON, Arizona
J. R. COOPER, Arkansas
E. R. SANDSTEN, Colorado
A. E. WILKINSON, Connecticut
G. F. GRAY, Delaware
C. C. VINCENT, Idaho
CHARLES E. ABBOTT, Florida
JOHN R. FAIN, Georgia
H. D. BROWN, Indiana
E. S. HABER, Iowa
WALTER B. BALCH, Kansas
JOHN S. GARDNER, Kentucky
H. B. SINGLETARY, Louisiana
J. H. WARING, Maine
FRED W. GEISE, Maryland
RAY M. KOON, Massachusetts
GEORGE E. STARR, Michigan
FRED A. KRANTZ, Minnesota
J. C. C. PRICE, Mississippi
J. T. QUINN, Missouri
F. M. HARRINGTON, Montana
H. O. WERNER, Nebraska

ROBERT STEWART, Nevada
J. R. HEPLER, New Hampshire
L. G. SCHERMEHORN, New Jersey
FABIAN GARCIA, New Mexico
F. O. UNDERWOOD, New York
ROBERT SCHMIDT, North Carolina
A. F. YAEGER, North Dakota
ROY MAGRUDER, Ohio
GEORGE W. COCHRAN, Oklahoma
A. G. B. BOUQUET, Oregon
W. B. NISLEY, Pennsylvania
G. E. ADAMS, Rhode Island
A. M. MUSSER, South Carolina
N. E. HANSEN, South Dakota
J. A. MCCLINTOCK, Tennessee
F. M. LYLE, Texas
GEORGE STEWART, Utah
MARSHALL B. CUMMINGS, Vermont
L. B. DIETRICK, Virginia
CHESTER L. VINCENT, Washington
K. C. WESTOVER, West Virginia
JAMES G. MOORE, Wisconsin
A. F. VASS, Wyoming

Invest a dollar in Dependable Information

If you are growing vegetables—
If you contemplate growing vegetables—
If you have some acreage suitable for growing vegetables—

If you have taken out a contract with a cannery or pickle company—
If you want to investigate the vegetable proposition as a possible source of supplementary income—

YOU NEED AMERICAN PRODUCE GROWER

The Investment is just a dollar.

The Dividends are many more dollars.

PIN A DOLLAR BILL TO THIS COUPON

Harry W. Walker, Publisher,
American Produce Grower,
53 W. Jackson Blvd., Chicago.

Dear Sir: Here's a dollar for American Produce Grower every month for three years.

Name _____

Address _____

date is the Mayflower peach, at \$1 to \$1.25 per half bushel basket to retail distributors. —J. W. Green.

Portersville, July 15.—The exceptionally warm weather in March, followed by a rainy season started the growth early and also started the scab earlier than usual. Our orchard of over 20 acres of apples was full of bloom. We were not expecting a full crop on account of so much rain during the blooming season, but, later, after the fruit had set and it began dropping, we wondered what had happened. When the state inspector came along, he told us that we did not commence to spray early enough and that we did not spray often enough. Next year we are going to be right after the county agent to inform us when the proper time comes along. Our crop this year will be a marked failure, or in other words, we are minus at least 5000 bu. just because we did not have the proper spray schedule. But with one exception, an orchard of 300 acres, we have the most apples in the county.—C. R. Oliver.

Shickligny, July 10.—I have prospects for the largest crop of winter apples that I have ever grown, but I will not have over 25% of a crop of summer apples. The shortage of summer apples is due to lack of bloom as a result of an excessive crop of early apples last year. I was talking to our county agent yesterday and he said the crop was spotted. In the unsprayed farm orchards there is practically nothing. I do not think the crop in Luzerne county will reach 50%. Cherries with me have been a 100% crop. Pears, the shortest crop I have ever grown. Bartlett's, 10%, and Kieffers, a complete failure for the first time in my experience. Our apples are suffering from drought and if we do not get a good rain soon, the crop will be shortened still more, especially early varieties.—Irvin Chapin.

RHODE ISLAND

Buttontown, July 10.—Our fruit trees blossomed very full but we had so much rain and cold weather about blossoming time that the fruit did not set well. It would be 80% if we had then we have had a very long drought so that much of the fruit has dropped off. We are today having the first rain (shower only) for 5 weeks and we have had unusually hot weather, which makes a very bad combination. I think the Baldwin is going to be much better in both quality and quantity than the McIntosh. Delicious and other varieties, and as Baldwins are our biggest crop, the growers may get as much money from their total crop as usual. —Richard M. Bowen.

Kingston, July 15.—The apple crop in this section averaged a little better than 40% and has suffered quite severely from curculio and scab injury. The peach crop is extremely light, running about 25% and has also suffered from curculio. At present the oriental fruit moth is quite noticeable in this time, and will, no doubt, be a serious pest this fall in the fruit. Raspberries and blackberries are rather light due to extremely dry weather. The grape crop is at present unusually good and very clean. Of all the fruit crops in the State, it is the most promising. —E. P. Christy.

Mesquite Park, July 11.—The apple crop will be approximately the same as the crop of 1928. Nearly all apple trees had an extremely heavy bloom but pollination was apparently poor on account of weather conditions and the set was not as heavy as was expected. The set on Baldwin is particularly good but the set on McIntosh, Rhode Island Greening and other apples is rather light. Spraying has been pretty thoroughly done and the fruit looks clean and particularly good.—John M. Denn.

Portsmouth, July 11.—The fruit in Transparent is light; Wealthy, Duchess and Baldwin, good; Delicious, very light; McIntosh, light. Crop will probably be about 65% of 1928. Peaches have a good set, with the exception of J. H. Hale, which has never set a crop in this vicinity regardless of interplanting with other varieties. Most of the orchards are well sprayed or dusted. Good control of diseases and insects, with the exception of the oriental fruit moth and in some cases apple maggot.—H. W. Hathaway.

SOUTH CAROLINA

July 10.—The apple crop will be light, according to conditions on July 1, but 339,000 bu. being forecast for 1929. The peach crop, with 450,000 bu. in 1928, when conditions on July 1 for 10 years was 64% with 5-year average crop of 454,000 bu. No commercial crop figures. The peach crop is about half of last year, 700,000 bu. as against 1,363,000 bu. Condition on July 1 for 10 years has averaged 65%, and the crop average for 5 years, 752,000 bu. Peach conditions on July 1, 1929, 46%; 1928, 75%; 10-year average, 60%. Peach production for 1929 figured, on July conditions, at 84,000 bu., as compared with 153,000 bu. in 1928 and the 5-year average of 98,000 bu. Grapes show a condition of 69% this month, compared with 82% last July, and a 10-year average of 80%. The 1928 production was 1725 tons, and the 5-year average, 1461 tons. —U. S. Crop Rep't.

June 25.—The condition of the South Carolina apple crop remains about as indicated a month ago, that is, a normal crop is expected. In some instances codling moth injury seems to be less than last year and we hope for fruit of good quality.

The peach crop appears to be somewhat shorter now than a month ago. Both curculio and bacteriosis have taken their toll, with the result that our crops seems to be decreasing somewhat as time goes on. Growers who have a good crop are spraying heavily but in some cases are having some difficulty in keeping pests under control. A few Carmons will move from South Carolina about the second week in July. Georgia Belles will start around July 15 and these will be followed in a few days by Elbertas. Growers have offered prices of around \$2.25 per crate but are a little slow to accept since they feel that better prices may be obtained at time of harvest.—R. A. McInty.

SOUTH DAKOTA

July 10.—Apple crop, total production, estimated at 154,000 bu. (61%), as compared with 1928 crop of 230,000 bu. condition 75% July, 1928). Average annual production for 5 years, 1923-27, 159,000 bu. (65% average for 10 years). No commercial crop.—U. S. Crop Rep't.

TENNESSEE

June 24.—The peach crop will amount to about 1600 cars. However, in some orchards the fruit is still dropping, which may cause a reduction in this estimate. Curculio and oriental peach moth may further reduce the size of the crop.

The early apple crop amounted to 40 or 45 cars and all of this mostly shipped from middle Tennessee. Three cars were shipped from

Dayton, Tenn., and were of the Early Harvest variety.

Early peaches are ripening about Chattanooga but I have no information on carlot shipments. Elbertas will be picked and shipped from July 20 to August 5. I have heard that a few growers have been offered \$2 for their U. S. No. 1 peaches with a guarantee that if they bring more they will receive the additional benefit. However, this is not authentic.—E. M. Prather.

St. Elmo, July 11.—Peaches average half crop, with best cared for trees having a good crop to no crop at all. Fair quality but considerable oriental moth damage. Apples even shorter crop on account of fire blight in some plantings and varieties. The strawberry business is in a poor way on account of poor crops and returns in recent years.—J. E. List.

TEXAS

July 10.—The apple crop may reach 248,000 bu. this year, compared with 216,000 bu. in 1928 and a 5-year average of 252,000 bu. Conditions as of July 1, were: 1929, 60%; 1928, 38%; 10-year average, 59%. Peach production: 1929, 2,005,000 bu.; 1928, 1,612,000 bu.; 5-year average, 1,692,000 bu. Peach conditions as of July 1: 1929, 70%; 1928, 50%; 10-year average, 58%. Peach production: 1929 estimate, 491,000 bu.; 1928, 390,000 bu.; 5-year average, 427,000 bu. Grape condition of 77% promises heavier tonnage than last year when, with July 1 condition at 71%, the crop was 2100 tons. —U. S. Crop Rep't.

UTAH

July 10.—Apple conditions as of July are reported as follows: 1929, 66%; 1928, 78%; 10-year average, 79%. Total apple crop, estimate for 1929, 719,000 bu., including 154,000 bbls. commercial; 1928, 880,000 bu., of which 190,000 bbls. were commercial; 5-year average, 899,000 bu., of which 154,000 bbls. were commercial. The peach crop is figured as: 1929, 329,000 bu.; 1928, 612,000 bu.; 5-year average, 553,000 bu. There will be about 69,000 bu. of pears, as compared with 87,000 bu. in 1928, and a 5-year average of 60,000 bu. Grapes look like 82%, compared with 88% last year, when the yield was 1520 tons.—U. S. Crop Rep't.

VERMONT

July 12.—The 1929 apple crop, while somewhat smaller than the 1928 crop, in all probability will be so much better in quality, being largely free of scab, that it will compare in money value quite well with last year. There should be more than 100,000 barrels of first-class apples this year.

Insects and diseases have not been especially troublesome. There was so much good weather before and following the blossoming time that nearly all growers were able to apply all of the prescribed spray applications and as a consequence have secured pretty good control. The quality in all probability will be good. The larger crop will be on McIntosh, Tolman, Delicious and Wealthy and lighter crops on Spys, Greenings and Fameuse. Growers who did not succeed in getting on the delayed dormant or the pre-pink have some scab this year. These people have probably learned an expensive lesson and will doubtless profit by it in subsequent seasons. There is very little blight this year.

Hail has wrought much damage in at least two commercial orchards. Hail stones as large as beechnuts were reported which pelted the apples, scarring most of them. Hail insurance is coming into use. It is being approved by more and more growers each year.

Paper mulch in at least two commercial orchards, namely that of George F. Richards at East Clarendon, and Stock of W. A. Stocker at Shoreham, is being tried out as a means of suppressing weed grass and other weeds, especially among small trees, with apparently good results. Richards has 1000 trees paper mulched. —M. B. Cummings.

Orleans county, July 12.—Early conditions were quite favorable for a heavy set of fruit, but dry weather in June caused a heavy drop in many orchards. McIntosh are still carrying a full crop but most other varieties are rather light and spotted. Aphid is causing considerable trouble this season. Hail insurance conditions have been quite favorable to the development of fungus, which is being kept under fairly good control in most orchards. There is an abundant crop of cherries of fine quality but very few plums and about an average set of pears. Thus far this section has escaped the hailstorms which have done much damage in some parts of the State.—C. W. Hurlbut.

Orleans, July 14.—Strawberries and apples are the chief commercial fruit crops of Orleans county, though neither is grown extensively. Howard No. 17 is our most valuable strawberry and McIntosh our most valuable apple, with Fameuse and Wealthy next in importance. The strawberry crop was heavier this year than usual. The outlook for apples is, I believe, the best in several years. Apple scab is our worst disease. Insects are not very troublesome this year. Commercial orchards are sprayed. Home orchards are mostly neglected.—Howard C. Bartlett.

Springfield, July 10.—We have been spraying a little more than usual. Most trees will bear some fruit, with Baldwins the McIntosh and McIntosh and Transparent the most. Altogether, we will probably have a fair crop.—A. W. Aldrich.

Vergennes, July 14.—The blossoming period indicated that we would have a fair to excellent crop of apples but the rains hindered proper spraying in this vicinity. Therefore, we have quite a sprinkling of scab. We also have some hail damage. But I think the crop throughout the State will be larger than last year. We have no large pear orchards but the indications are for a fair crop. The season has been very good for berries of all kinds and also cherries. —A. T. Clark.

VIRGINIA

July 1.—Reports indicate that the crop has not improved during the past month, and if anything, seems to be weakening somewhat. Scab is very prevalent and will be a considerable factor this year. Hail has also caused considerable damage in many sections. The market for early apples has started off very encouragingly. Yellow Transparents have netted \$2 to \$2.50 per bushel, f. o. b.

The peach crop seems to be developing well and indications are that good prices may be expected.—W. S. Campbell.

Chilhowie, July 10.—This section had an unusually heavy bloom but was hard hit by freeze and frost and the crop pretty generally wiped out on low lands. But there will be a general average of 33% to 35% of a crop in this section. There has been some hail injury but up to this writing fruit is of unusually large size for this time of year. This has been an unusually bad year for scab infection but the better orchardists have fought this disease faithfully and the injury from this source will be

ly Harvest
hattanoga
shipments.
pped from
that a few
heir U. S.
at if they
additional
ic.—E. M.
range half
ng a good
but consid-
ples even
t in some
erry busi-
poor crops
st.

ch 248,000
00 bu. in
bu. Con-
%; 1928,
roduction:
1. 5-year
ons as of
year aver-
estimate,
r average,
promises
with July
2100 tons.

ly are re-
78%; 10-
estimate
000 bbls.
h 190,000
e, 899,000
mmercial,
529,000
e, 553,000
pears, as
with July
like 82%,
the yield

ile 'some-
all prob-
ity, being
mpare in
r. There
of first-

en espe-
nch good
ossoming
to apply
ions and
good con-
will be
McIntosh,
lighter
p. Grow-
the de-
me scab
learned
ss profit
is very

at least
as large
lited the
nsurance
oved by

erial or-
hards at
cker at
of sup-
specially

good re-
munched.

onditions
of fruit,
vy drop
carrying
e rather
consider-
weather
to the
cept un-
There
quality
age set
escaped
mage in
rt.
apples
Orleans
nsively.
awberry
e, with
e. The
r than
believe,
is our
trouble-
s are
neglect-

praying
ll bear
McIn-
ner, we
ldrich,
period
excel-
proper
e have
e some
through-
We
ations
a very
erries.

op has
and if
what.
nsider-
caused
The
very
netted
well
y be
n un-
dressed
wined
generat-
s sec-
ut up
e size
n un-
e bet-
faith-
ill be

held down to the minimum.—H. L. Bonham.
Waynesboro, July 13.—The apple crop in this section is equally as large as in 1928, with a larger crop of Yorks and a slightly reduced crop of other varieties, except Lowry, a comparatively new apple of very fine quality which ranks with Delicious, and which this year will have a larger crop due in part to young trees coming into bearing. All apples will be large in size; a two-inch apple will be a fairly ex- cept perhaps on Winesaps. Worms are well under control but due to an unusual amount of rainfall scab will be more prevalent than usual. The peach crop will also be larger than last year, and the fruit promises to be large in size. About half the peach crop is shipped and the balance sold locally or to truck trade. The larger commercial orchards are well sprayed, but smaller orchards that received only one or two sprays will this year run more culls than good apples.—L. P. Foster.

WASHINGTON

July 10.—The condition of the apple crop is reported as of July 1 at 70%, as compared with 84% in July, 1928, and a 10-year average of 77% in July. Total apple production is estimated at 28,350,000 bu. for 1929. In 1928 the production was 33,500,000 bu., and for the 10-year period the average annual production was 28,785,000 bu. The commercial pack for 1929 is forecast at 24,780,000 boxes, as compared with 30,000,000 boxes in 1928, and the 5-year average of 24,378,000 boxes. Peach conditions are reported July 1 for all years: 1929, 65%; 1928, 85%; 10-year average, 54%. Peach production for 1929 is forecast at 1,034,000 bu. The peach crop in 1928 was 1,470,000, and for the 5-year average, 827,000 bu. The peach crop too, indicates a shrinkage. Conditions as of July 1 were: 1929, 59%; 1928, 84%; 10-year average, 68%. Pear production for 1929 is forecast at 2,842,000 bu. against 3,500,000 in 1928, and the 5-year average of 2,328,000 bu. Grape conditions of 82% for July 1, 1929 are slightly lower than 1928, when with conditions reported at 83% on July 1, a crop of 2025 tons was harvested.—U. S. Crop Rept.

Spokane, July 1.—Seventy dollars a ton for pears, compared with \$25 and \$35 last year, has been offered at Wenatchee recently, according to reports received at Spokane. This was offered by an outside canning corporation. Prices for cherries have not been fixed so far, but some ranchers have sold their cherries for 10 to 10 1/2 cents for Royal Annes and 15 cents for Bing and Lamberts. It is predicted that the Wenatchee Valley soft fruits will bring in more money this year than ever before.—Spokane News Bureau.

Wenatchee, July 13.—The prospects are for at least a normal crop of good quality fruit of

all varieties in Wenatchee and north central Washington. Soft fruits, including sweet cherries, apricots, peaches, etc., are above normal. Pears generally are below normal. Apples, which are the principal crop, promise about 19,000 cars as against 2100 last year. Sweet cherries were mostly contracted for early at about 15 cents to the grower for Bing and Lamberts and 10 cents for Royal Annes. However the present market is only 11 cents. Bartlett pears have been pretty generally sold for about \$75 per ton. Weather conditions have been decidedly favorable for fruit. Pests are well under control.—E. D. Gensinger.

WEST VIRGINIA

Martinsburg, July 13.—Present apple crop conditions in this section appear to be about equal to that of last year or about 67% of a full crop. There will be a reduction in the yield of Black Twig, Stayman, Delicious, Ben Davis and possibly Grimes Golden as compared with the 1928 crop. These reductions, however, will be made up chiefly by an increase in the York Imperial variety. In general, trees that were loaded with fruit last year are light this year and the reverse is also true. The crop as a whole is clean, although there are some orchards that have scab, worm and aphid injury. Bad spraying conditions which prevailed at the time of application of the pink and petal fall sprays is responsible for the presence of scab. Grimes Golden, Ben Davis, Stayman and a few other varieties will be marred by russet this year as in the past but indications are that russetting will not be so heavy on the apple nor so prevalent as during 1928. Hail injury has also occurred on several orchards, some growers believing their damage to range from 5% to 25%. Peach plantings are not so heavy but those who have plantings are expecting 75% to 100% full crop.—H. P. Sevy.

WISCONSIN

July 10.—The condition of the apple crop on July 1, 1929, was estimated at 70%, as compared with 76%, July 1, 1928, and the 10-year average condition of 72%. Total apple crop for 1929 was forecast at 1,707,000 bu., compared with 2,160,000 bu. in 1928 and the 5-year average production of 1,836,000 bu. Commercial apple crop estimate for 1929 was placed at 129,000 bbls., compared with 159,000 bbls. in 1928 and a 5-year average of 127,000 bbls. Grapes, July estimate of 80% is the same as July, 1928, and the 10-year July average. In 1928 Wisconsin produced 495 tons as compared with a five-year average production of 295 tons. No 1929 estimate for grape production until August 1.—U. S. Crop Rept.

Grapes Suffer from Summer Pruning

THE SUMMER pruning of grapes has been receiving special study at the New York Experiment Station at Geneva for the past several years, and the station specialists are now convinced that summer pruning is not a desirable practice. Marked delay in the maturity of the vines and a lowering of the sugar content of the fruit are the chief reasons why this practice cannot be encouraged, says Richard Wellington, station horticulturist, in commenting on the tests.

Late-maturing varieties usually show a greater decrease in the sugar content and a more striking difference in maturity when pruned in the summer than do the earlier sorts, but Delaware was the only variety in the station test to show a higher percentage of sugar when summer pruned, says Mr. Wellington. Lack of maturity was related to a de-

crease of sugar, but this varied with the variety.

"Just what effect summer pruning will have on the next season's crop and just how it will affect winter hardiness of the vines, it is too early to state from these tests. It is probable, however, that the vine as well as the fruit stored up less food, such as starches, and hence would be more subject to adverse winter conditions.

"Since the fruit of the summer-pruned grapes in the tests on the station grounds was in no way superior to unpruned grapes, either in size or appearance; in all the late varieties was much more immature; and in all varieties but two contained less sugar, summer pruning is condemned as unprofitable and, in fact, injurious to the vine."

Large-Size Peaches Favored

A CLOSER knowledge of peach production costs and market preferences will aid the grower in handling his peach crop to best advantage, according to a statement issued by the United States Bureau of Agricultural Economics. A recent survey discloses a decided consumer-preference for large-size peaches, according to the statement, the full text of which follows:

An understanding of the usual behavior of the market and detailed knowledge of his own production costs, harvesting expenses and transportation rates will aid the peach grower in disposing of his crop to the best advantage. The Bureau of Agricultural Economics' recent survey of the marketing of peaches in the New York market emphasizes the preference for the larger sizes. This sometimes brings about a condition in which the grower may find it more profitable to harvest and ship only the larger fruits.

The survey reports that at a certain period of the 1924 season large peaches returned to the grower about \$1.25 a crate. Medium-sized peaches made a corresponding return of about \$1, and the smaller sizes only 70 cents a crate. After deducting transportation and commission charges the returns on the three sizes were about 80 cents, 55 cents and 20 cents.

The study also indicated that the cost of picking, crating and delivering the peaches to the railroad car amounted to

about 53 cents a crate. So the large peaches would return about 25 cents a crate above the cost of harvesting and transportation. The medium size would only just about break even, and the smaller size would return to the farmer less than half the cost of the crates and the harvest labor. Under such a market situation the peach grower would find it more advantageous to pick and pack only the largest of his crop, leaving the remainder to drop as not worth picking.

Michigan Orchard Tour

AUGUST 6, 7 and 8 are the dates set for the "Orchard Tour" of the Michigan State Horticultural Society. Fruit growers will meet at the Graham Horticultural Experiment Station west of Grand Rapids. On this tour growers will have an opportunity to visit orchards in the vicinity of Grand Rapids, Ionia, Kalamazoo and Three Rivers.

Experiments in Georgia have demonstrated that pecans can be kept in cold storage over one season to another in perfect marketable condition, according to George H. Firor of Georgia State College of Agriculture. They must, however be in a fresh and matured condition when placed in a storage temperature of 32 degrees Fahrenheit, and they must be kept at that temperature until ready to market.

Ethyl saved \$39.00
per 100 acres



A PRACTICAL FARMER in Nebraska made a careful test of Ethyl Gasoline on his farm. Here are the results of his test:

Using kerosene as a fuel in his tractor, he plowed one acre in 75 minutes.

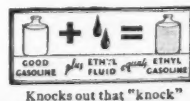
Using Ethyl, he plowed one acre in 51.6 minutes. That represents a saving, when Ethyl was used, of 23.4 minutes per acre.

At that rate he was saving 39 hours per 100 acres. Let us calculate very conservatively and say a man and his tractor are worth \$1.00 per hour. That means that he would save \$39.00 every time he plowed 100 acres. The added cost of fuel, as between Ethyl and kerosene, would be approximately 10 cents.

Here are hardpan facts showing why Ethyl is an economy in the end. (That is why it is a premium fuel!) The hours it saves mean dollars earned at the end of the season. Ethyl brings added power out of any equipment which cannot be obtained with ordinary fuel. The easing of the labor of driving makes for greater efficiency.

Stock up on Ethyl. Test it out and see the difference.

ETHYL
GASOLINE



© E. G. C. 1929

ETHYL GASOLINE CORPORATION, 25 Broadway, N. Y. C. 56 Church St., Toronto 36 Queen Anne's Gate, London

Index to Advertisements

The concerns whose advertisements appear listed below are equipped to give prompt and satisfactory service to the American fruit grower. Most of them issue literature that is freely at the disposal of our subscribers. It is to the advantage of all that when writing to an advertiser you use the address exactly as it appears in the advertisement, and that you state in your letter: "I read Your Advertisement in AMERICAN FRUIT GROWER MAGAZINE."

AUTOMOBILES

Buick Motor Co. (Marquette).....
.....Second Cover
Oakland Motor Car Co. (Pontiac)..... 11

AUTO TIRES

Flisk Tire Co., Inc. 15

AUTO TRUCKS

Chevrolet Motor Company..Third Cover
International Harvester Co. 9

BATTERIES

National Carbon Co., Inc. 4

CIDER PRESSES

Hydraulic Press Mfg. Co. 14

FLY KILLER

Harold Somers 16

FRUIT PACKAGES

Pierce-Williams Company 14

GASOLINE

Ethyl Gasoline Corp. 19

HOTELS

Atlantic Hotel 16
Hotel Pennsylvania 14
Lafayette Hotel 14
Webster Hall Hotel 16

INSULATING MATERIAL

Celotex Company 10
Insulite Company 13

SMOKERS' SUPPLIES

R. J. Reynolds Tobacco Co.
.....Back Cover

TRACTORS

Caterpillar Tractor Co. 17
Cleveland Tractor Co. 12

Fruit Growers of Ohio Meet

THE OHIO State Horticulture Society will hold two summer meetings this year, one in southern Ohio on August 8, at the orchard of Roland Rodgers, near Lockland, and the other in northern Ohio, on August 15, at the orchard of Mantle & Mantle, Painesville.

The southern Ohio growers will meet at Mr. Rodgers' home, Amity and Ridge roads, just north of Cincinnati, at 9:30 A. M., where they will find some very interesting experimental work on the control of the oriental fruit moth. The party will go to the Opekasit Farm for lunch, after which an interesting program will be given.

The northern Ohio meeting will be in the 100-acre orchard of Mantle & Mantle which is known as a very efficiently managed orchard. Here will be seen some interesting plots of sprayed and dusted trees. A short program has been arranged for the afternoon.

At both meetings, orchard equipment will be exhibited and many new developments demonstrated. This is a relatively new part of these meetings.

As usual, the society will welcome a large attendance. All fruit growers, whether members or not, together with their wives and friends, are invited and urged to attend. The attendance in the past years has been very good and it is expected that this year it will be even greater.

WHO CAN PRAY?

The boat was sinking. The skipper rushed up to a crowd of scared passengers.

"Who among you can pray?" he asked them.

"I can," answered the minister.

"Then pray, mister," ordered the skipper. "The rest of you put on life preservers. We're one short."

Rogue River Valley Pear Industry

(From Page Seven)

fresh water sprays, and then by the cold air fans, which blow the water off the fruit, leaving it practically dry—all done within a few feet space. The dry fruit is then conveyed to the packers.

Soil management and irrigation are problems to which Rogue River growers are now giving primary attention. As Otis Booth, production manager of the Rogue River Properties Company, operating some 800 acres of fruit, says, "The only way we can compete in the pear production game is by raising larger tonnage per acre, thus reducing the per ton cost. With an ideal pear climate, abundant irrigation water, and less blight than many districts, we feel that our district will remain in the pear producing business after many others fall by the wayside. It is because of the importance of good yields, however, that just now we are giving attention to soil management and irrigation improvement."

It was Mr. Booth who introduced the idea of using alfalfa hay as a fertilizer in orchards. In their 800 acre planting they use between 400 and 600 tons per year. Alfalfa hay at ten dollars per ton, according to Mr. Booth, in nitrogen content alone is equivalent to seventy dollar sulphate of ammonia, and in addition you get the humus provided by the hay.

With this system of soil management the Rogue River Properties Company has doubled the production of their orchards every year during the past four years. By improving the friability of the soil, according to Mr. Booth, on much of their land the cost of cultivation has been reduced 50 per cent.

Gravity irrigation water was developed in the Rogue River Valley less than ten years ago. The average annual precipitation is from 15 to 17 inches, and this added water has stimulated production immensely. As in most new districts, however, in some instances water has been used uneconomically.

In co-operation with L. P. Wilcox, county agent, an extensive project is under way to determine the most economical use of water in pear production. Growers, too, are irrigating as a result of this work, more and more according to their soil moisture conditions. Soil augurs are being used and portions of orchards which have previously been overwatered are now receiving less water, while some areas with too little moisture are being supplied with additional quantities.

"What is the average yield per acre for all of your pear orchards?" I asked

County Agent Wilcox. "The average for our entire acreage," he replied, "is about 300 packed boxes per acre, or half a carload. We do have numerous orchards, however, irrigated properly and which to carry on a good soil fertility program, either by growing cover crops or using alfalfa hay, produce an average of a carload per acre. The 150 acres of H. Van Hoevenberg is one such orchard."

In connection with using alfalfa hay, Mr. Van Hoevenberg has developed a unique idea. Before harvest he spreads the hay beneath the trees, and the wind-fall pears alighting upon this soft carpet of hay are not damaged. Mr. Van Hoevenberg says he salvaged sufficient wind-falls and marketed them to advantage to more than pay for the cost of his alfalfa hay.

As there has been some controversy over the long or high renewal system of pruning, I was interested in determining just what system was most generally used by leading growers. The orchards obtaining the highest yields per acre, and which have the lowest cost of production, invariably are using the long or high renewal system. In fact, 85 per cent of the pear trees in the Rogue River Valley are thus pruned. The old heading back system has practically been eliminated. On some varieties, however, the long system is slightly modified and heavy thinning out is combined with a very light cutting back.

There is a tendency towards increased use of commercial fertilizer. J. C. Barnes of Talent is an ammonium sulphate enthusiast. He has been able to obtain high production and excellent quality through the use of sulphate of ammonia on soil which is only 18 inches deep.

Everywhere the pear grower is only successful at the price of eternal vigilance. The Rogue River Valley is not unlike other districts in this respect. An eternal battle is waged against the codling moth, scale, blister mite, spider mite, scab, and fire blight. Year after year this battle is successful, and Rogue River pears, with their russet and red cheeks and fine quality, roll to market.

It is, indeed, "a great country." It may be that the location of this valley—amid its scenic grandeur, traversed by the Rogue River where the Steelhead raise to the fly—has a lot to do with the flavor of this pear, together with the spirit of the individuals who grow it, causing them to produce a pear of quality unexcelled.

Honey Bees Build Up Income

BEES can build up income for you in more ways than in making honey. At least that has been the experience of F. H. Burkhardt, a cherry grower in Traverse City, Mich. According to an Associated Press dispatch, he recently reported that 80 colonies of honeybees paid him an extra dividend of \$2400 last year.

The payment was made, according to this dispatch, in sour cherries—fruit that would not have set if Mr. Burkhardt had not moved the bees into his orchard at blossom time. Their presence in the orchard resulted in a 10 per cent increase in the production of cherries, according to this grower's estimate.

Based on the 200-ton crop produced last season, Mr. Burkhardt said the 10 per cent increase represented 20 tons of cherries. Figured at six cents a pound, this meant an extra dividend of \$2400, to say nothing of the good done to nearby orchards.

Got Tip from Neighbor

"It was on one of these cold, wet, backward springs that my attention was called to the value of bees as a pollinizer of cherries," Mr. Burkhardt said. "A neighbor horticulturist, who is also a beekeeper, kept his bees in one lot near his home. This happened to be just over the line from another neighbor's cherry orchard, while the orchard of the beekeeper was some 80 rods distant.

"As the result of cold, cloudy weather during the blossom period, the bees did not attempt to fly very far from home,

so they worked in the nearby orchard, which in due season had a very heavy crop, while the orchard of the beekeeper had a very light crop of cherries.

"The results were so outstanding and convincing that from that time on we have been using bees as a pollinizer.

One Colony Per Acre

"Today we own our own bees and do not have to rely on bringing bees from a distance. When possible, we place one colony per acre in a full grown orchard.

"We distribute the bees as evenly as possible through the orchard, so that the bees are directly under the trees on which they are supposed to work. This saves time and energy on the part of the bees. When you consider that it takes an average of 20,000 trips for a bee to gather a pound of honey, to say nothing of the time spent in making the comb and finishing the honey, this is a great saving."

Airplane Motor Used to Remove Calyces

A WESTERN fruit grower, Harry W. Owen, Hayward, Calif., has put an airplane motor to novel use. Attaching it to a huge blower, he has devised a method of blowing the rotting calyces from setting fruit, thus removing the cause of "jacket rot," which has resulted in heavy losses to fruit growers. Connected to the blower is a large canvas sleeve. The motor and fan-wheel of the blower deliver through the sleeve a blast of air of a volume of 20,000 cubic feet per minute, at a

Classified Advertisements

ADVERTISING RATES, 15 CENTS A WORD
Write advertisement on separate sheet. Please enclose cash with order. For advertisements addressed in care of this publication, allow 5 words for address.

SPECIAL NOTICE

All advertising copy, discontinuance orders or change of copy must reach this office by the 10th of this month for next issue.

Address
AMERICAN FRUIT GROWER MAGAZINE
53 West Jackson Boulevard, CHICAGO

AGENTS-SALESMEN WANTED

PAYING POSITION OPEN—I'LL PUT MONEY in your pocket and make your income grow continuously if you will use all or part of your time looking after my business. I'll put you in a business where every man, woman and child is your customer—for everybody must have shoes and hosiery. I'll supply all you need to start in at once making \$15 per day and increase your pay every month. Complete sample outfit of actual shoes and hosiery. Million dollar stock to deal in. Free book, "Getting Ahead," will surprise and delight you. Write for it today. Wm. J. Mischel, Tanners Shoe Mfg. Co., 8 24th C St., Boston, Mass.

BIG PAY DAILY, SELLING SHIRTS OF ALL kinds, lumber jackets, underwear, hosiery, sweaters, play suits, overalls, pants, raincoats, leather coats. Outfit free! Experience unnecessary. Nimrod Co., Dept. 102, 4922-23 Lincoln Ave., Chicago.

\$12.00 DAILY SHOWING NEW LINEN-LIKE tablecloth. Washes like oilcloth. No laundering. Sample free. Bestever, 666 Irving Park Station, Chicago.

WANTED—MAN WHO KNOWS FARM LIFE, to travel in country. Steady work, good pay. McCann & Company, Room A-1408, Winona, Minn.

BEE HUNTING

BEHUNTERS—USE MY BEESCENT AND INSTRUCTIONS. One man did and found three bee trees in one afternoon. Will Grover, Bristol, Vt.

DOGS FOR SALE

HUNDRED HUNTING HOUNDS, CHEAP. Trial. Hunting supplies. Catalogue. Haskins, C49, Herrick Ill.
FOR SALE—MY FOUR YEAR OLD WIDELY known coonhound on 29 days' trial. Paul Davis, B-54, Charleston, Mo.
FOR SALE—MY TRAINED COONHOUND ON trial. R. L. McCuan, Millington, Tenn.

FARMS AND ORCHARDS

ORCHARD—2000 APPLE TREES, CHOICE varieties in bearing. Priced right. Terms. T. W. Campbell, Elgin, Ill.
ORCHARD—3000 APPLE TREES, 160 ACRES, good buildings. Box 553, Windber, Pa.

FARMS WANTED

WANTED—TO HEAR FROM OWNER OF LAND for sale. O. Hawley, Baldwin, Wis.

FUR RABBITS

MAKE BIG MONEY WITH CHINCHILLA Rabbits. Real Money Makers. Write for facts. 846 Conrad's Ranch, Denver, Colorado.

HELP WANTED—INSTRUCTION

WANTED IMMEDIATELY—MEN-WOMEN, 18-55, qualify for permanent government positions, \$105-\$250 month; experience not required; vacations with full pay; common education; many needed. Write Instruction Bureau, 259, St. Louis, Mo., today.

MAIL CARRIERS-POSTOFFICE CLERKS, \$1700-\$2300 year. Steady work. Men 18-45. Frequent examinations. Common education. Particulars free. Write immediately. Franklin Institute, Dept A-73, Rochester, N. Y.

PACKING FORM

AGENTS AND USERS WANTED TO SELL THE Breckon ring face bushel basket packing form—a self seller, having several leading features. Write for description and price. Wm. A. Breckon, Grand Junction, Mich.

PLANTS

LATHAM RASPBERRY, FREE FROM MOSAIC, crown gall, etc. Fall, spring delivery. A. B. Coleman & Son, Atkin, Minn.

SONG POEM WRITERS

SONG POEM WRITERS—"REAL" PROPOSITION. Hibbler, D-96, 2104 N. Keystone, Chicago.

rate of 130 miles an hour. By playing the sleeve up and down the tree and at different angles, the fruit is blown clean. The device is moved from tree to tree by a tractor. (Picture on page 22.)—K. E. Chute, California.

Preserving Strawberries by Freezing

A NEW METHOD of putting up strawberries at the Spokane Valley Growers' Co-operative Association plant at Opportunity, Wash., this year for a large pie baking concern in Chicago was reported by the association recently. The berries are shipped just as they come from the field, with the exception that they are stemmed. The crates are placed in a cold storage apartment with the temperature ranging from zero to 10 above. In a few hours the strawberries are as hard as bullets and will be kept in this condition until the pies are ready for the oven.

"But surely," urged Jones, "seeing is believing."
"Not necessarily," replied Brown. "For instance, I see you every day."

Why Not "Federate" the Fresh Fruit Industry

(From Page Five)

ers. Nor, apparently are these idle objections. They are the result of observation by fruit growers and men who are in intimate touch with fruit growers in many sections of the country.

The horticultural societies and other fruit growers' associations should be supported and strengthened by increased membership, as they admirably serve a most important purpose of growers' organizations, except that they cannot readily meet together nationally and speak for the fruit growing industry on national questions.

Horticultural Societies Represent Growers

Taking the country as a whole, it may be truthfully stated that the existing personnel of the directorates of the state horticultural and fruit growers' societies provides the finest type of representation, in thought and interest, that the American fruit grower could possibly secure. Were these societies each to select men from their respective boards of directors, or executive committees, to meet annually in conference, a national expression could be given to the voice of the fruit grower.

Were these delegates to meet with the shippers and distributors, in the proposed fruit trade federation, adding their counsel to the deliberations and serving on all important committees where programs are created, the fruit industry could speak with one voice and act as a unit on any matters concerning the industry.

One of the principal cost items to the horticultural and fruit growers' societies for participation in the federation would be the expense of their representatives at the annual convention. This expense should be more than offset by the increase in membership which could be secured. Seemingly, such representation would prove a sound investment for the societies. That many shippers, and especially distributors, would benefit from a closer acquaintance with the general problems of production admits of little argument. So, too, in my belief, would growers benefit from a more intimate knowledge of the problems of distribution.

I can see nothing but increased prosper-

ity for every section of the fresh fruit and vegetable industry as the result of a national federation such as is proposed and has been approved by the membership of the American Fruit and Vegetable Shippers' Association. The single activity of market extension alone would more than justify such a national federation. It is generally recognized that the domestic consumption of fruits could be extended far beyond present production, with benefit to everyone in the nation except to the doctors and undertakers. And the doctors, to their credit, can be counted upon to lend powerful support to such a movement.

An Invitation Extended

With this necessarily brief outline of the proposed trade federation, we pass the proposal to the horticultural societies for discussion. The fact that there are points of contact between grower, shipper and distributor capable of producing friction need not be glossed over. A committee representing all interests, with all available facts before them, can generally reach a solution acceptable to all.

The unaffiliated fruit growers could be shown, I believe, that their interests lie with the only organizations that can effectively represent them—the horticultural societies. With this increase in membership and strength, these societies should wield an increasingly powerful influence in their respective fields and, through the proposed federation, in the national industry.

In every branch of human endeavor it is the question of organization and its effectiveness that makes for success or failure. Nothing of any consequence has ever been accomplished without organization.

Secretary Hyde, in his Fourth of July address, directed primarily to those interested in agriculture, reminded us that organization has given us homes, a higher standard of living, schools which are models of efficiency, and an industrial development which is the envy of the world.

While it is true that organization sometimes requires the sacrifice of some of our personal rights, yet in making that sacrifice the individual finds a greater freedom.

Crop Increase of 360 per cent from Extra Apple Spray

By AMOS KIRBY

BY APPLYING one extra spray for the Japanese beetle, in addition to the regular treatment, apple growers in Burlington county, New Jersey, have been able to increase the crop of marketable fruit by 360 per cent. In a two-year experiment conducted in the orchards of David Ballinger, New Jersey, the entomologists of the Japanese Beetle Laboratory were able to increase the yield from 217 to 800 bushels per acre.

The experiment was conducted in an orchard of Starr apples, a variety that ripens when the beetle is at its height and one which is quite attractive to the insect. In the summer of 1927, a check plot was left in the orchard to determine the percentage of injury that the beetle inflicted on the trees as well as on the fruit. The balance of the orchard was given one application of lead arsenate and flour, at the rate of three pounds of lead and two pounds of flour to 50 gallons of water. The sprayed trees showed only a two per cent defoliation, while the unsprayed check plot showed a 98 per cent injury. The fruit also showed great injury on the unsprayed trees, while on the treated trees the injury was very light.

In the summer of 1928, the same treatment was followed, leaving the check plot as in the year previous. At harvest time, the unsprayed trees yielded an average of two bushels per tree, while the sprayed trees had a crop of eight bushels per tree. Observations and actual count revealed about the same percentage of injury to the fruit as in 1927.

In explaining the wide difference in the yields, the entomologists state that the defoliation of the trees in the summer of 1927 lowered their vitality to such an extent that they could not develop a normal set of fruit buds. The sprayed trees, which had been given the protection to the foliage, produced a full crop of fruit. The defoliation of the tree in mid-summer by the Japanese beetle is blamed for the lowered yield the second season. They believe that continued low yields will result if the foliage is permitted to be injured year after year by insects.

The spray for the Japanese beetle was applied between June 25 and July 1, just prior to the appearance of the beetle. Only one special spray was applied in addition to the regular sprays put on for the codling moth and other insects.

Forty Million Dollar Co-op Organized in California

UNDER the title of the Fruit Industries, Inc., a \$10,000,000 co-operative agricultural organization has been incorporated in California.

The organization, according to its statement of purpose, will not only market all sorts of farm products, but will also aid its members in seeding and harvesting. The organization is said to be the most pretentious of its kind ever organized in the West.

Among the organizers are A. R. Morrow, R. D. Fontana, Wallace Sheehan, H. A. Caddow and L. H. Godt, all of San Francisco.—H. L. Holdal, California.

Buyers' Service Bureau

For the convenience of our readers we list below some lines of fruit farm equipment and home conveniences. If you are considering the purchase of any of these items we will be glad to forward your request for information to responsible manufacturers. From them you will receive full information as to prices, etc.

SPRAY MATERIALS

- ☐ Miscible Oil
- ☐ Fish-Oil Soap
- ☐ Dry Lime-Sulphur
- ☐ Liquid Lime-Sulphur
- ☐ Bordeaux Mixture
- ☐ Copper Sulphate
- ☐ Arsenate of Lead
- ☐ Colloidal Sulphur Sprays
- ☐ Sulphur-Lead Sprays
- ☐ Summer Oil
- ☐ Contact Sprays for Sucking Insects
- ☐ Calcium Caseinate

DUST MATERIALS

- ☐ Dormant Dust
- ☐ Superfine Dusting Sulphur
- ☐ Sulphur-Lead Dust
- ☐ Monohydrated Copper Dust
- ☐ Copper-Lead Dust
- ☐ Nicotine Dust

FARM TOOLS, ETC.

- ☐ Gasoline Engines
- ☐ Kerosene Engines
- ☐ Carpenter Tools
- ☐ Machinists' Tools
- ☐ Pipe Fitting Tools
- ☐ Masons' Tools
- ☐ Plasterers' Tools
- ☐ Lathes
- ☐ Buzz Saw Outfit
- ☐ Stump Pullers
- ☐ Fencing Tools
- ☐ Post Hole Diggers
- ☐ Shovels ☐ Picks ☐ Axes
- ☐ Electrical Wiring Tools

TILLAGE TOOLS

- ☐ Single Walking, 2-horse
- ☐ Single Walking, 1-horse
- ☐ Single Riding
- ☐ Riding Gang
- ☐ Disk Plows
- ☐ Horse Harrow
- ☐ Tractor Tillage Tools
- ☐ Horse Cultivators
- ☐ Hand Cultivators
- ☐ Grape Hoe
- ☐ Spiketooth Drag
- ☐ Springtooth Drag
- ☐ Subsoiler, Horse
- ☐ Subsoiler, Tractor
- ☐ Rakes ☐ Hoes
- ☐ Scuffle Hoe

FERTILIZERS

- ☐ Nitrogen Fertilizers
- ☐ Phosphates
- ☐ Potash Salts
- ☐ Mixed Mineral Fertilizers
- ☐ Animal Manures
- ☐ Agricultural Lime
- ☐ Gypsum (Landplaster)

MISCELLANEOUS

- ☐ Orchard Heaters
- ☐ Orchard Thermometers
- ☐ Thermometers
- ☐ Microscopes
- ☐ Pruning Tools
- ☐ Grafting Tools
- ☐ Grafting Wax

FURNITURE, ETC.

- ☐ Living Room Furniture
- ☐ Bed Davenport
- ☐ Tables ☐ Desks
- ☐ Rugs ☐ Bookcase
- ☐ Dining Room Sets
- ☐ Silverware ☐ Dishes
- ☐ Glassware
- ☐ Table Linens
- ☐ Kitchen Cabinet
- ☐ Aluminum Ware

SPRAYING EQUIPMENT

- ☐ Power Spray Rig
- ☐ Horse Traction Rig
- ☐ Cart Rig, Hand Pump
- ☐ Barrel Outfit
- ☐ Compressed Air Sprayer
- ☐ Hand Spray Pump
- ☐ Power Spray Pump
- ☐ Spray Rig Tank
- ☐ Water Supply Tank
- ☐ Supply Tank Tower
- ☐ Pipe and Fittings
- ☐ Pressure Spray Hose
- ☐ Spray Nozzles
- ☐ Spray Rods ☐ Spray Guns
- ☐ Spray and Dust Masks

DUSTING EQUIPMENT

- ☐ Power Dusters
- ☐ Power Mixer and Duster
- ☐ Traction Cart Duster
- ☐ Hand Power Duster
- ☐ Knapsack Duster

TRACTORS

- ☐ Vineyard or Garden
- ☐ Orchard

TRUCKS

- ☐ Light Delivery
- ☐ Medium ☐ Fast
- ☐ Heavy Hauling
- ☐ Chassis

BUILDING

- ☐ Ready Cut Buildings
- ☐ House Plans ☐ Barn Plans
- ☐ Plumbing Supplies
- ☐ Bathroom Fixtures
- ☐ Fruit Storage House Plans
- ☐ Lumber ☐ Millwork
- ☐ Insulation Materials
- ☐ Builders' Hardware
- ☐ Roofing ☐ Steel Siding
- ☐ Plaster ☐ Stucco

HOUSEHOLD CONVENIENCES

- ☐ Power Washing Machine
- ☐ Power Mangle
- ☐ Clothes Dryer
- ☐ Dish Washer
- ☐ Sewing Machine
- ☐ Phonograph
- ☐ Radio ☐ Ladders
- ☐ Sweepers and Cleaners
- ☐ Carbide Gas Irons
- ☐ Gasoline Irons
- ☐ Pressure Water System

STOVES AND RANGES

- ☐ Gasoline Stove
- ☐ Carbide Gas Stoves
- ☐ Electric Range
- ☐ Coal Range
- ☐ Electric Hot Plate
- ☐ Electric Grill
- ☐ Blue Flame Kerosene Range

HEATING EQUIPMENT

- ☐ Warm Air Furnace
- ☐ Hot Water Heating System
- ☐ Steam Heating System
- ☐ Oil Burners
- ☐ Gas Heating System
- ☐ Base Burner
- ☐ Coal Heater
- ☐ Wood Burning Heater
- ☐ Oil Heater
- ☐ Gasoline Pressure Heater

LIGHTING EQUIPMENT

- ☐ Kerosene Lamp
- ☐ Kerosene Lamp
- ☐ Carbide Gas System
- ☐ Farm Electric Plant

AUTO ACCESSORIES

- ☐ Tires ☐ Batteries
- ☐ Spark Plugs ☐ Gas Savers
- ☐ Delivery Bodies
- ☐ Auto Washers

FOR THE HARVEST

- ☐ Ladders ☐ Fruit Pickers
- ☐ Picking Sacks
- ☐ Orchard Pick-up Wagons
- ☐ Berry Crates and Fillers
- ☐ Box and Shook Stock
- ☐ Bushel Baskets
- ☐ Tui-shape Baskets
- ☐ Less-than-bu. Baskets
- ☐ Fiber Fruit Packages
- ☐ Package Labels
- ☐ Canning Equipment
- ☐ Fruit Dryers or Dehydrators
- ☐ Grading Machinery
- ☐ Fruit Cleaners
- ☐ Fruit Presses
- ☐ Cider Presses
- ☐ Pasteurizing Outfits
- ☐ Barrel Facers
- ☐ Basket Facers
- ☐ Barrel Presses
- ☐ Box Presses
- ☐ Liners and Cushions
- ☐ Stencils
- ☐ Wax Paper

ELECTRICAL

- ☐ Wiring and Lighting Supplies
- ☐ Electrical Refrigeration
- ☐ Vacuum Cleaner
- ☐ Kitchen Motor
- ☐ Sewing Machine Motor
- ☐ Separator Motor
- ☐ Electric Fans
- ☐ Floor Lamps
- ☐ Electric Miller
- ☐ Electric Water Pumps
- ☐ Electric Iron ☐ Grills
- ☐ Heaters ☐ Vibrators

PAINTS, OILS, ETC.

- ☐ Inside Paint ☐ Barn Paint
- ☐ Furniture Stains and Enamels
- ☐ Auto Enamels
- ☐ House Paint
- ☐ Wall Paper
- ☐ Cold Water Wall Finishes
- ☐ Roofing Paint
- ☐ Roofing Cement
- ☐ Lubricating Oil
- ☐ Cup Grease
- ☐ Belt Dressing
- ☐ Transmission Grease

MISCELLANEOUS CONTROL EQUIPMENT

- ☐ Codling Moth Bands
- ☐ Fumigants for Root Insects
- ☐ Sticky Preparations

CLOTHING

- ☐ Ladies' and Children's Clothing
- ☐ Aprons
- ☐ Men's Clothing
- ☐ Overalls
- ☐ Rayons and Silks
- ☐ Woollens
- ☐ Cotton Fabrics
- ☐ Linens

NURSERY STOCK

- ☐ Plants
- ☐ Trees
- ☐ Small Fruit Plants
- ☐ Strawberry Plants
- ☐ Ornamentals
- ☐ Perennials

SEEDS

- ☐ Garden ☐ Field
- ☐ Flower ☐ Bulbs
- ☐ For Cover Crops
- ☐ Seed Potatoes

Check the items upon which you wish information that will aid you in making an intelligent purchase. Send it TODAY to

Buyers' Service Bureau, American Fruit Grower Magazine,
53 W. Jackson Boulevard, Chicago, Ill.

(We request that you check only such items as you are planning to purchase at this time or in the near future. To guard against the use of this service by children or by others who like to get mail but have no serious intention of purchasing, we request that you be sure to fill in the second line below.)

Gentlemen: I am planning to buy the articles checked above.

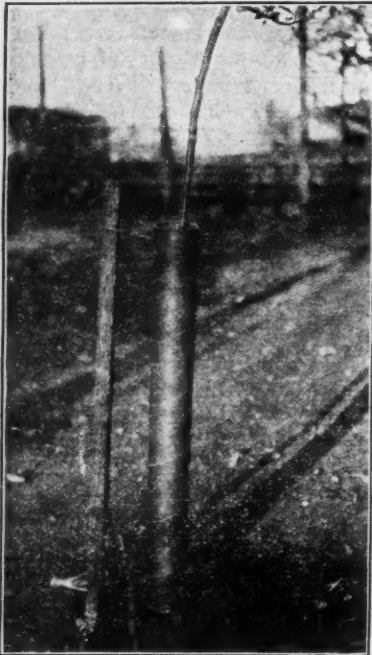
I am the ☐ owner, or ☐ renter of acres.

Name

Address

WHAT THE CAMERA SEES

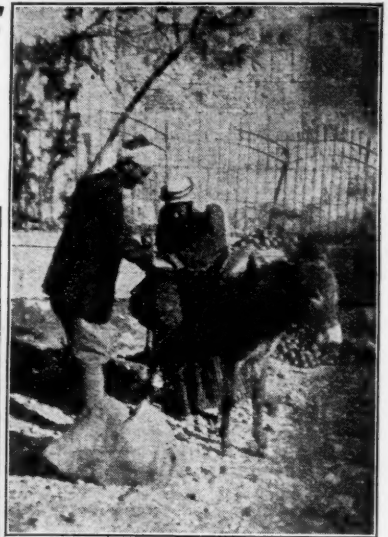
AMERICAN FRUIT GROWER MAGAZINE will pay Five Dollars for the photo selected each month as the PRIZE PHOTO, and will pay One Dollar each for other photos not receiving the prize money but which we are able to use. Send your photo, illustrating anything of interest to the fruit grower, with a short item telling the FACTS about the picture. Address photos to the Editor. If not suitable for our use, your photo will be returned.



William F. Noe, Amana, Iowa, finds the pulp-board mailing tube a satisfactory protection against rodents. See article in this issue.



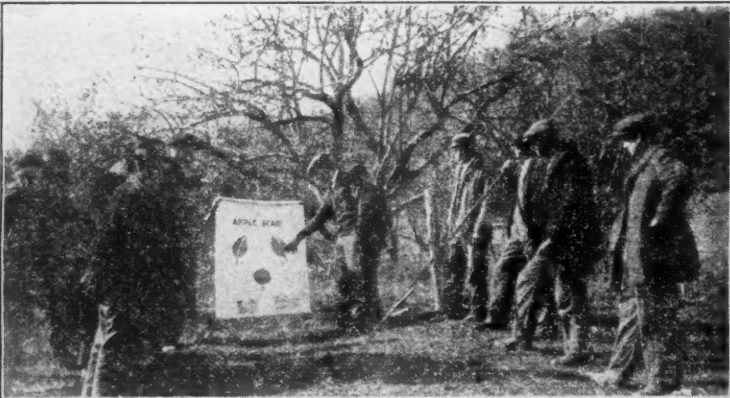
Wisconsin and Michigan fruit growers in the cherry orchards of W. R. Roach & Co., Hart, Mich., listening to talk by H. D. Hootman, secretary of the Michigan society. He is telling them about the remarkable results secured in apple and cherry pollination through the use of bees in the orchard at blossoming time. Photo by Conrad L. Kuehner



Orange peddler outside Damascus Gate, Jerusalem, whose equipment and stock consist of a donkey, some burlap saddle bags and a pile of oranges. The juicy, delicious Jaffa orange is his finest product. No city fruit dealer in America grades his product more carefully than do these fruit peddlers of the Holy City. Photo by E. R. Leibert



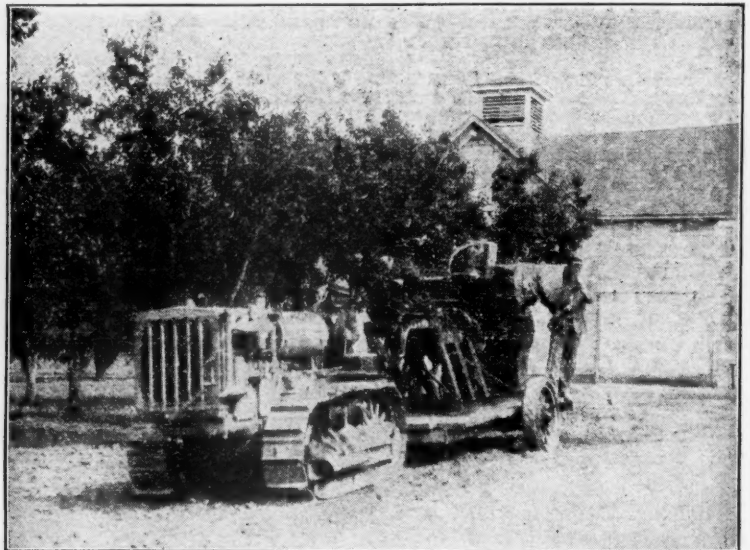
In the western deserts dates wear umbrellas during the summer that may be lowered in case of unexpected rain. Dates cannot stand rain, and these paper bags, tied above the clusters, have saved growers many dollars.



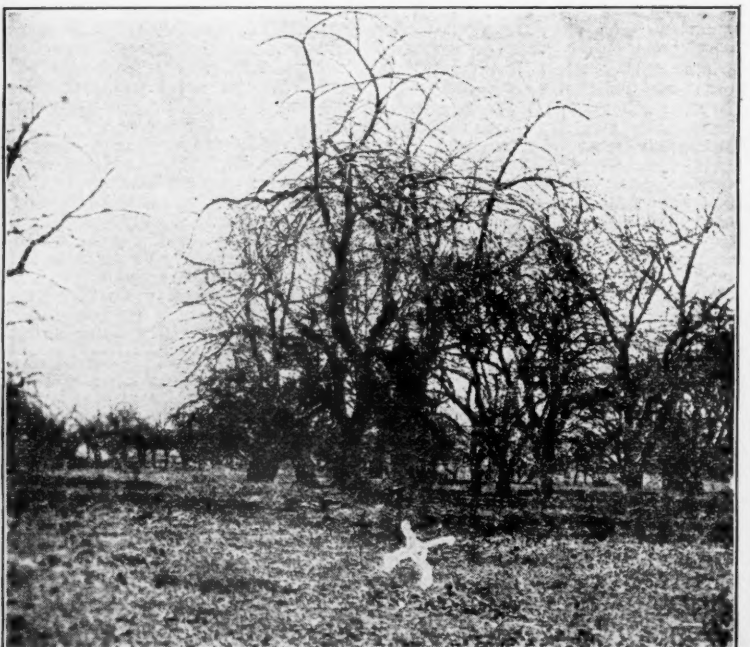
An orchard management demonstration in one of Wisconsin's apple orchards, conducted by Horticultural Department, U. of W.



Vermont fruit growers in annual Orchard Meet, admiring the orchard of Luther Putnam, an able young Vermont fruit grower of but 86 summers, at Cambridge. Photo by Prof. M. B. Cummings



This California fruit grower invents a novel and speedy method of removing blossom calyxes after the fruit has set, according to K. E. Chute, who sends the picture. (See article in this issue.) PRIZE PHOTO



The original Thompsons County King apple tree as it appears in the village of Jacksonville, N. Y. It is now over 100 years old, but is becoming badly decayed. Its days of usefulness are nearly over.

Volu

THE
fare
tralliza
and in

Grow
Peris
Creat
Orga

ing A
justifi
Board
fits to
of inc
mind t
that n

The
benefit
rection
the F
formed
Califor
dollar
Farm
to be p
poratio

The
tion p
CAN F
an ear
be rec
Agricu
of Agr
past y
market
ists.

The
satisfac
by the

As w
table o
the nee
a fifty
ers of
It is to
by the
round c

The
of the
Inc., w
rience

While
of Ame
daily p
a more

In th
by For
in whic
ers will

That
vegetab
step in
That th
finances
such as
Hence c
with cl

In th
behoove
sure the
day may

MAG
CHA
Bo
C. A
Tr
HAR
der
JAM
Pr
E. G.
Ma
A. C.

American Fruit Grower Magazine for September

Volume XLIX

SEPTEMBER, 1929

Number 9

THE PRESENT year may go down into history as the most portentous in events affecting the welfare of the fresh fruit industry. Unity and centralization, the twin forces that have raised commerce and industry to its present level of prosperity, have been called to the assistance of the producer of fruits and vegetables.

Growers of Perishables Create Huge Organizations

In laying down the dictum that agricultural co-operatives must work together to benefit under the Agricultural Marketing Act, the Federal Farm Board has more than justified its existence. It might be stated that if the Board had no financial assistance to give, the benefits to agriculture from its leadership would still be of incalculable benefit. But it must be borne in mind that it is the power of the Board to loan money that makes its mandates very generally respected.

The California grape industry was the first to benefit from centralized organization. Under the direction of the California Vineyardists' Association, the Federal Grape Stabilization Corporation was formed to organize and finance the marketing of California's immense grape crop. A nine million dollar loan, half from the revolving fund of the Farm Board and half from the California banks, is to be placed at the disposal of the Stabilization Corporation and of the Sun-Maid Raisin Growers.

The objectives of this California grape stabilization program will be explained to readers of AMERICAN FRUIT GROWER MAGAZINE by Lloyd S. Tenny in an early issue of this magazine. Mr. Tenny, it will be recalled, was formerly Chief of the Bureau of Agricultural Economics, United States Department of Agriculture. He resigned that position during the past year to direct the creation of a central grape marketing organization for the California vineyardists.

The Florida citrus organizations, after effecting a satisfactory working agreement, have been assisted by the Federal Farm Board to the extent of \$300,000.

As was to have been expected, the fruit and vegetable organizations scattered over the country saw the necessity for centralization of sales efforts, and a fifty million dollar corporation, the United Growers of America, came into being early in the month. It is to work in harmony with the policies laid down by the Federal Farm Board and serve as a year-round outlet for the fruit and vegetable co-operatives.

The new organization is built around the structure of the old Federated Fruit and Vegetable Growers, Inc., which has had many years of successful experience in marketing perishables.

While the general features of the United Growers of America have been given wide publicity by the daily press, commercial fruit growers will welcome a more detailed explanation of its objectives.

In this issue appears the first of a series of articles by Former Secretary of Agriculture Wm. M. Jardine, in which the purposes and plans of the United Growers will be discussed at length.

That a nationwide sales-outlet for the fruit and vegetable co-operatives is a natural and necessary step in economic growth will scarcely be denied. That the United Growers of America, in its plans, finances and personnel fulfills the requirements of such an organization is a matter for discussion. Hence our readers will follow Mr. Jardine's articles with close interest.

In these days of gigantic financial undertakings it behooves the growers of perishable crops to make sure their sales structure is adequate to meet present day marketing needs.

HARRY W. WALKER, EDITOR

CHESTER G. CAMPBELL, Managing Editor

RALSTON R. HANNAS

Fruit Farm Poultry

MARY LEE ADAMS

The Orchard Home

HARLEY F. WILSON

Fruit Farm Beekeeping

HAZEL BURSELL

The Fruit Grower's Wife

EDITORIAL ADVISORY BOARD

W. L. FLOYD, Professor of Horticulture, College of Agriculture, Gainesville, Fla.

N. E. HANSEN, Department of Horticulture, South Dakota State College of Agriculture and Mechanical Arts, Brookings, S. D.

C. D. MATTHEWS, Consulting Horticulturist, Raleigh, N. C.

W. C. O'KANE, Department of Entomology, University of New Hampshire, Durham, N. H.

A. J. OLNEY, Professor of Horticulture, University of Kentucky, Lexington, Ky.

E. P. SANDSTEN, Horticulturist, Colorado Agricultural Experiment Station, Fort Collins, Colo.

O. F. E. WINBERG, President, Gulf Coast Citrus Exchange, Silverhill, Ala.



In This Issue

"BIG BUSINESS" METHODS TO AID FRUIT MARKETING. By William M. Jardine	5
HOW BORDEAUX MIXTURE ACTS AS AN INSECTICIDE. By Dwight M. DeLong	6
BETTER ORCHARD SERVICE WITH EQUIPMENT THAT "FITS" THE JOB. By F. H. Higgins.	7
FRUIT CROP PROSPECTS FOR 1929	8
PROBLEMS OF THE APPLE INDUSTRY. By W. H. Hall	9
"FEDERATING" THE FRUIT INDUSTRY, A SYMPOSIUM	10
ROOTSTOCKS FOR CALIFORNIA. By Myer J. Heppner	12
A PROFITABLE APPLE BY-PRODUCT. By Jack Luddy	18
Inspection Work Increases	11
Before Storing the Sprayer for the Winter	13
Grape Industry Secures Nine Million Loan	16
Apple Tree to Be Honored	16
Store Half of Apple Crop	16
Professor Motz Accepts London Appointment	16
Fruit Stocks to Be Excluded	17
Fresh Peaches to Be Available Throughout Year	21

DEPARTMENTS

EDITORIAL AND CONTENTS	3
CHATS WITH THE FRUIT GROWER'S WIFE	14
FRUIT FARM POULTRY	15
CLASSIFIED ADVERTISING	20
INDEX TO ADVERTISEMENTS	20
WHAT THE CAMERA SEES	22

To You

THE FRUIT FARM MARKET is recognized as one of the important elements of American business. Agriculture's income amounts to more than twelve billion dollars a year, of which three-fourths of a million dollars are derived from fruits. From this income the farmer buys many things; implements and machinery, spray and dust materials, fertilizers, paint, automobiles, furniture, medicines, clothing, musical instruments, tractors, shoes, cooking utensils, seeds, rugs, books, coffee, jewelry, fountain pens, cameras, power plants.

The makers of these things have important messages for you. They want to tell you of improvements in their products, of greater values, of finer materials and better workmanship. They want to tell of new designs and new achievements. They want to tell you how to make your dollar go farther and accomplish more.

Many of their messages are printed in this journal. They are here to help you in your buying. Reading them, you can select those articles best suited to your needs and your pocketbook with the assurance you are getting high quality at fair price.

Advertisements are personal messages to you from the manufacturer.

MAGAZINES, INC., PUBLISHERS
CHARLES W. PRICE, Chairman
 Board of Directors.
C. A. TUPPER, President and
 Treasurer.
HARRY W. WALKER, Vice-President
 and General Manager.
JAMES E. MONTGOMERY, Vice-
 President-Asst. to President.
E. G. K. MEISTER, Vice-President,
 Manager Cleveland.
A. C. BAMBERGER, Secretary.

American Fruit Grower Magazine

Established in 1880 Title Registered in U. S. Patent Office
 53 WEST JACKSON BLVD. CHICAGO, ILL.

SUBSCRIPTION RATES: One Year 50c, Three Years \$1.00,
 Five Years \$1.50. FOREIGN: \$1.00 Per Year

Entered as second class matter Oct. 17, 1917, at Post Office at
 Chicago, Ill., under Act of March 3, 1879. -

Published Monthly on the First

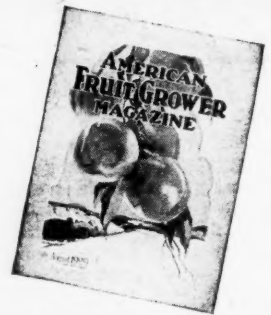
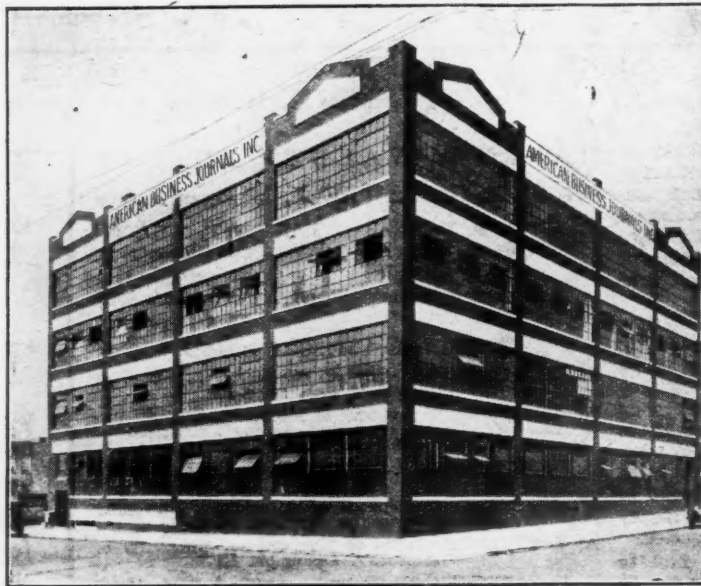
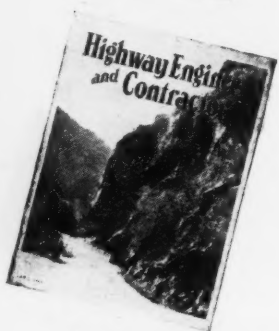
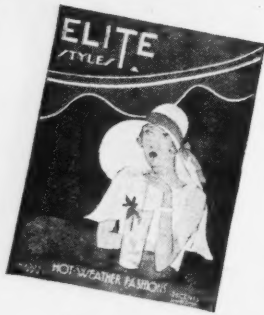
THE NATIONAL FRUIT MAGAZINE OF AMERICA

BRANCH OFFICES and Representatives

NEW YORK CITY, Suite 601, 250 Park Ave. **ROGER FISON**, Eastern Manager.

CHICAGO, 1119 Advertising Building. **J. C. BILLINGSLEA**.

CLEVELAND, Engineers Bank Bldg. **E. G. K. MEISTER**, Manager.
 Copyrighted 1929



Important Offering to Subscribers of
AMERICAN FRUIT GROWER MAGAZINE
American Business Journals, Inc.

145,500 Shares—Capital Stock
 (No Par Value)

PRICE \$11 Per Share

Estimated earnings for the current year, based upon the combined earnings for the year 1928, are \$1.00 per share, equivalent to over 9 per cent of the present selling price of the stock.

Authorized Capital Stock 1,200,000 Shares

Outstanding Shares (including this issue) 200,000

AMERICAN BUSINESS JOURNALS, INC., HAVE NO BONDS OUTSTANDING, NO PREFERRED STOCK, NO BANK LOANS.

AMERICAN BUSINESS JOURNALS, INC., own and control the following seven periodicals with a combined circulation of 450,000 per issue and own and control THE VAMOS CORPORATION SPECIAL COLORING PROCESS.

AMERICAN FRUIT GROWER MAGAZINE
 AMERICAN PRODUCE GROWER
 POWER TRANSMISSION
 CONCRETE PRODUCTS

HIGHWAY ENGINEER AND CONTRACTOR
 AMERICAN MACHINE & TOOL RECORD
 ELITE STYLES AND
 THE VAMOS CORPORATION

ADVERTISING RATES ARE UP TO \$2,000.00 A PAGE PER ISSUE in some of these periodicals. THE ADVERTISERS ARE AMONG THE LARGEST CORPORATIONS IN THE WORLD.

Every one of these periodicals are among the leaders in their respective fields. All are established and known; some have been in existence over forty years.

THE VAMOS CORPORATION, which is owned by the AMERICAN BUSINESS JOURNALS, INC., owns THE SPECIAL COLORING PROCESS invented by Mr. Frank Vamos, and produces its product at a saving of over 60%. THE BUSINESS OF THIS COMPANY IS CAPACITY, WORKING A DAY AND NIGHT SHIFT TO ENABLE THE PRODUCT TO BE TURNED OUT ON CONTRACTS MADE FOR THIS COMPANY.

The directors of the American Business Journals, Inc., are all stockholders and have been in this field of endeavor for from 20 to 30 years.

The amount of this stock offered is limited and subject to advance in price; therefore telegraph or write for stock subscription at once.

For Stock Subscription Cut This Out
 and Mail

H. H. GOODMAN, INC., 80 Wall St.,
 New York, N. Y.
 Gentlemen:

Send at once.....shares of American
 Business Journals, Inc., Capital Stock at \$11.00
 per share, to my Bank, to be paid for at the
 Bank on delivery of stock.

Subscriber's Name.....

Bank's Name

City

These shares are offered subject to prior sale,
 allotment, and/or advance in price, and may be
 withdrawn without notice.

Application will be made to list this stock on
 a New York Exchange.

H. H. GOODMAN, Inc.
 80 Wall St.,
 New York City, N. Y.

For Book of Detailed Information Cut This Out
 and Mail

H. H. GOODMAN, INC., 80 Wall St.,
 New York, N. Y.
 Gentlemen:

Send without any obligation to me your book-
 let of details of AMERICAN BUSINESS JOUR-
 NALS, INC., stock offering.

Name

Street

City and State.....